

FLIGHT

First Aero Weekly in the World.

Founder and Editor: STANLEY SPOONER.

A Journal devoted to the Interests, Practice, and Progress of Aerial Locomotion and Transport.

OFFICIAL ORGAN OF THE ROYAL AERO CLUB OF THE UNITED KINGDOM.

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TO OUR READERS.

The Supply of "FLIGHT." Important Notice.

Order "FLIGHT" to be either delivered or reserved for you regularly.

As the demand for "FLIGHT" is so great each week, it is of the utmost importance that readers should place their orders *firmly* for copies of "FLIGHT" at the bookstalls, their newsagents, or direct from the publishers, at 44, St. Martin's Lane, W.C., if they wish to secure a copy every week and avoid disappointment. The stringent Government restrictions in regard to the supply of printing paper necessitates this precaution in order that only actual numbers required are printed, and all wastage by unsold copies may thereby be reduced to a minimum, if not eliminated.

THE PUBLISHERS.

EDITORIAL COMMENT.



WITH the Birmingham speech of Lord Montagu as a guide, and the Parliamentary battledore and shuttlecock farcical method during the past week of handling and burking the thirst for information upon the all-absorbing subject of the British Air Services as circumstantial evidence, there can hardly be but one opinion as to the reason of the formation of the Aviation Co-ordination Committee. It was brought into being for the simple purpose of scotching public agitation for

what is becoming daily more of a necessity, the creation of an Air Minister. At the "Unanimous" first blush we were inclined to give credit for an honest—yes, honest—attempt to give the air problem the chance in this war which, by force of reiteration, it had at last dawned upon the Coalition Government it really deserved. But like many other problems which have been by this method shelved until forced ultimately by public opinion to completion, the Government hoped to smother the irresistible demand for energetic aerial measures for a sufficiently long period, with the hope that agitation would die down and the air menace (to the Coalition Government) prove but another flash in the pan. They were taking no risks in the matter. All that was needed was to ensure that nothing should be done *without the Committee was unanimous* that action should be taken. With the knowledge of the hereditary Service *non possumus* attitude upon every conceivable subject, when brought into communication with each other, this "unanimous" safety valve must have struck the humourists in the Cabinet as a delightfully subtle way of pulling the leg of the House and the public at the same time, whilst shelving the very prickly subject which like a porcupine seemed to be firing off its quills in every imaginable direction. But they had left out of their reckoning another little hereditary trait, the honour of the peerage. It shows but a poor grasp of human nature to imagine that men of the stamp of Lord Derby and Lord Montagu of Beaulieu would be content to sit down meekly and be parties to such a Parliamentary fraud as that perpetrated by reason of the powers, or rather the absence of powers, conferred upon this Co-ordination Committee, with the further fatal embarrassment of all decisions to take action having to be unanimous. And, then, when asked as to there being friction between members of the Committee, the usual

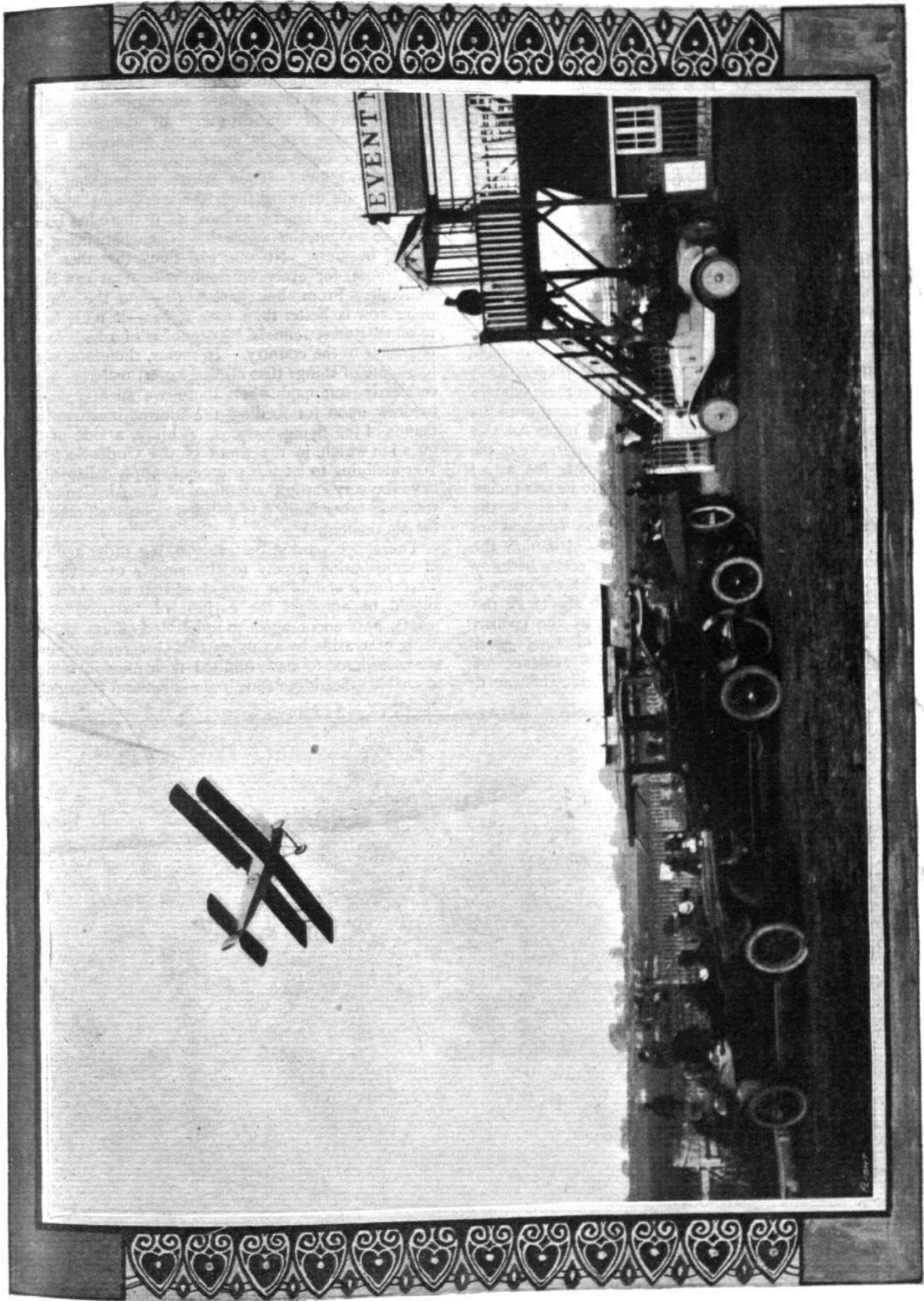
Government office-holder has the effrontery to say that no friction exists to his knowledge, only difference of opinion. In other words, want of unanimity, and therefore "nothing doing." This political Parliamentary jugglery is becoming about the most refined form of "legal crime" it is possible to conceive. It would not, perhaps, matter so much when only applied to one or other of the fatuous vote-catching so-called social problem committees which members of the pre-Coalition Government were wont to throw across the scent, when too closely pressed by honourable members or the great "B.P." wanting to know, you know. When this sort of trickery, however, is brought into operation in connection with such a vital factor in the successful carrying on of the war which Aviation is proving itself to be, it is about time to cry a halt and demand to have the truth, the whole truth, and nothing but the truth, &c. It is with the most sincere feelings of pleasure, therefore, that we welcome the retirement of Lords Derby and Montagu from such an anomalous position, so that they once more acquire their freedom of action to attempt to set right what they know is radically wrong. It strikes us as being far from courteous either to Parliament or to public opinion, the tone, almost amounting to flippancy, adopted by the Prime Minister himself towards many of the questions which have been put forward with honest intent in behalf of the Nation's welfare. After a date—April 15th—having practically been promised for a full discussion on the Air Question, Mr. Asquith coolly waives the whole question aside without naming a date with a remark amounting practically to the effect that it makes no difference when the subject is gone into. This, on the top of his statement that "he understood that the subject had been a good deal discussed in the House during the last three weeks," would appear as if War in the Air had but little interest or concern with him or the Government, else would he know what has been going on with such vigour during the past month or more. Again, no doubt with but one fixed and unalterable idea in the back of his head as to the insurmountable barrier of antagonism existing between the two Services, Mr. Asquith was particularly autocratic in his reply to Mr. Warwick Brookes. It was not possible, he said, to consider the problem of the future air policy of the country as a whole "apart from the requirements of the Army and Navy." Why, in the name of Heavens, not? We fancy that before many moons have waned either Mr. Asquith or some other Prime Minister will have to reverse this very dogmatic view. In this connection we are content to "wait and see" with every confidence in the ultimate outcome. It becomes daily more and more evident that the real value of the Air Services is not in the least realised nor understood by many of those responsible for the carrying on of this Empire. It is still regarded as a "side show" of the Navy and the Army at will. Its supreme importance during this war and in the years to follow does not appear to have been grasped by the Government as yet even in its elementary principles. All they appear to be concerned about is to lull the public into a false sense of security for the time being, through the medium of their bogus reform committee, bound hand and foot beforehand so that it is impossible for it to remain other than a purely passive buffer to attacks levelled against those who are really responsible for any neglect of office. Why, even the Liberal War Committee has passed a resolution urging the creation of an Aircraft Department under the direc-

tion of a Minister responsible to Parliament. It is in fact clear from almost every quarter that the time is over-ripe for such a departure, and however drastic such a change may be at such a period in our history, its very importance makes it but more imperative that the necessary re-organisation should take place whatever vested interests or feelings may suffer in the process. As to a definite plan of action, there is already in being the scheme put forward last week by Mr. Pemberton Billing. We do not suggest that this is a perfect scheme, and we are satisfied that Mr. Pemberton Billing does not claim perfection for it. As a broad basis by way of a start, however, there is ample scope for elaboration and modification, and if the Government will only take hold of it in an absolutely unbiassed manner, there should be no reason for a workable organisation, by way of a commencement, not being evolved. There are also the views, in the same connection, of Lord Montagu which he has submitted to the Cabinet. These for the time being are not available for discussion, but without doubt they can be advantageously taken into consideration, side by side with the plans of Mr. Pemberton Billing. To reject these constructive schemes without putting forward some alternative proposals, will be a losing game by the Government, we verily believe. They cannot afford either Imperially or—what is probably of even more concern to them—politically to further retard the claims of the Air problem, which promises with every month to assert its far-reaching powers for influencing the result of the present struggle more emphatically even than in the past. Is it possible that at the bottom of all this business there is the hatching of a political *coup d'état*, which may bring about chaos in many directions—even in directions in which least expected? The boomerang is a deadly weapon when manipulated expertly, but it has a way of doing nasty tricks occasionally. A number of things are being done under cloak of the Defence of the Realm Act, some of which the people may live to regret. We sincerely trust that the affairs of the Air will not be nobbled under these arbitrary powers.

In the meantime it is a source of gratification to us to know that the views, in the main, as now disclosed by the two great champions of Airism, are practically identical with those which have been advocated in the columns of "FLIGHT," in spite of the fact that we cannot claim to have been vouchsafed beforehand the inner knowledge of the views of either Lord Montagu or Mr. Pemberton Billing.

The Civilian Flying Schools.

It will be remembered that some weeks ago we suggested that the then newly-elected member for East Herts would find ready to his hand for an enquiry, the status, present and future, of the private flying schools. Last week, Mr. Pemberton Billing was able to get in a question upon this subject in Parliament. The query to the Under-Secretary for War was whether the principals and instructors of the civilian schools of aviation, who are doing good work in the making and training of pilots, were being called up under the Military Service Act, and whether the authorities realised the value of these training establishments, and in such case Mr. Billing asked for an assurance that the Government would take such action as to enable them to continue their national work. Mr. Tennant, as usual, dodged the direct question by saying that principals and instructors of these schools would, where possible and under certain conditions when called up under the Act, be placed in the R.F.C. Mr. Billing, however, pressed for something



AT HENDON.—Mr. H. Hawker visits Hendon on the two-seater Sopwith "Bullet."

more definite in the shape of an assurance for their being able to carry on their work, which was of great value to the country at the present time, but Mr. Tennant was not to be drawn. "It depends upon the value of the work being done. If it can be proved that they are doing good work, then I can give the hon. gentleman the assurance for which he asks," was his method of hedging this time. The seeking of further information by "I.R." was, by reason of House procedure, smothered with "Interruptions," and so there was nothing doing. Now, although the interpolation was based upon the working out of the Military Service Act, the real object, we venture to think, was more to bring into prominence the apparent tendency of the authorities to completely squeeze out the private flying schools, having, as they deem, obtained sufficient knowledge themselves to "carry on" without the civilians' help. Whilst there is more than one opinion as to the correctness of this view, it does seem a case of something beyond hardship that what is contemplated will practically amount to the confiscation of the goodwill of these schools. In the early days of the aviation movement and until the opening of the war, the main supply of pilots for this country was chiefly dependent upon the enterprise of the few private pilots who set to work to foster the art of flying, by initiating hundreds of pupils into its intricacies. Had it not been for this good early work, which at the time was regarded as mere fooling by some who now are endeavouring to bring about the schools' extinction, the British Air Service would have been in a pretty bad way at the initial stages of hostilities. Since the war opened, the authorities have been glad enough to absorb all the piloting talent that could be turned out by the civilian teachers, and a very large number of right good examples of efficiency is available in evidence of their valuable services in this direction. Influenced

by the growing requirements of the Air Services, those responsible for the schools at Hendon and elsewhere rose to the occasion and installed as good a "plant" as they could evolve for the purpose of tuition, one proprietor going even as far as to get out designs for and manufacture an engine especially suited for the work of the 'drome. By degrees the equipment in cases was as much as quadrupled to enable pace to be kept with the nation's call for pilots and still more pilots. Then comes the sudden damping down of the drawing from this very valuable source of energy until it begins to look as if there has been a set purpose to put the whole lot of civilian flying schools out of business. No one can deny that there is work and room for every efficient pilot that can be made available. From their past work—and the work being done now is better than ever it was—it must be patent to all that these schools' "output" is of a highly valuable character to the country. It seems, therefore, a scandalous state of things that all this expert material should be ruthlessly scrapped when there are such organisations to draw upon for feeding the almost inexhaustible demands of the flying services. This is a side of the air question which, in the event of the Under-Secretary for War inclining to let this source of supply collapse, should have the very earliest attention of the Air Committee or whatever other body it is decided upon shall take hold of the air element.

The schools are in perfect working order and capable of contributing largely to the supply of service pilots. Therefore it should be recognised that men of this calibre should be amongst the earliest of "starred" employments, and encouraged to redoubled efforts rather than being cast aside by an ungrateful Government, now they are considered to have fulfilled their mission sufficiently to enable officialdom to rub along without their help.



The first aeroplanes in the campaign in Mesopotamia where they have been used for carrying supplies to General Townshend's forces besieged in Kut.

The British Air Service

"PER ARDUA AD ASTRA"

Royal Naval Air Service.

The following appeared among the Admiralty announcements of the 11th inst. :—

Mr. T. M. Morgan entered as Probationary Flight Sub-Lieutenant (temporary), with seniority of March 22nd, and appointed to "President," additional, for R.N.A.S. Temporary commissions as Sub-Lieutenant (R.N.V.R.) have been granted to the following, with seniority of April 10th: W. G. Watson (Air-Mechanic, 1st Grade) and M. T. Spence, both appointed to "President," additional, for R.N.A.S.; and L. E. Nicholson, to "President II," additional, for R.N.A.S., April 17th.

The following appeared among the Admiralty announcements of the 12th inst. :—

Lieut. the Hon. R. Coke, to "President II," additional, for R.N.A.S. To date April 11th.

The following appeared among the Admiralty announcements of the 13th inst. :—

Flight Sub-Lieut. (temporary) L. A. Hervey, promoted to Flight Lieutenant (temporary), with seniority of April 1st. Charles F. M. Chambers, entered as Probationary Flight Sub-Lieutenant (temporary), with seniority of April 25th, and appointed to "President," for R.N.A.S.

Temporary commissions (R.N.V.R.) have been granted with seniority as follows: A. F. H. Smallpiece, as Lieutenant, April 12th; E. T. S. Jones and G. S. Hewett, both as Sub-Lieutenants, March 17th and April 12th respectively, and both appointed to "President," for R.N.A.S.; and G. A. Richardson (Air-Mechanic, 1st Grade), as Sub-Lieutenant, April 12th.

Royal Flying Corps (Military Wing).

The following appeared in the *London Gazette* of the 11th inst. :—

Temporary appointments made at the War Office.

Directors.—March 27th, 1916: Brevet Lieut.-Col. (Temporary Brig.-Gen.) William S. Brancker, R.A., from a Brigade Commander, and to retain his temporary rank whilst so employed. Brevet Lieut.-Col. (Temporary Col.) Duncan S. MacInnes, D.S.O., R.E., from a Deputy Director, and to be Temporary Brig.-Gen. whilst so employed.

Assistant Director.—Major Walter B. Caddell, R.A., from a Deputy Assistant Director, and to be Temporary Lieut.-Col. whilst so employed; March 27th, 1916.

Deputy Assistant Director.—Major B. Hopkinson, Unattached List, Territorial Force, from a Staff Captain at the War Office; March 27th, 1916.

Assistant Adjutant-General.—Major William W. Warner, retired pay, Indian Army, from a General Staff Officer, 2nd Grade, at the War Office, and to be Temporary Lieutenant-Colonel whilst so employed; March 27th, 1916.

General Staff Officer, 1st Grade.—Major (Temporary Lieut.-Col.) Lionel E. O. Charlton, D.S.O., Lancs. Fus., from a Wing-Commander, R.F.C., and to retain his temporary rank whilst so employed, vice Major (Temporary Lieut.-Col.) C. C. Marindin, R.A.; March 19th, 1916.

Establishments.

Flight-Commanders from Flying Officers (and to be Temporary Captains whilst so employed).—Temporary Lieut. A. M. Wilkinson, Hampshire R. (T.F.); Feb. 22nd, 1916. Second Lieut. J. A. Crook, Special Reserve; March 2nd, 1916. March 29th, 1916: Lieut. H. H. Kitchener, R.E.; Lieut. W. A. Grattan Bellew, Special Reserve; Second Lieut. P. G. A. Harvey, 3rd (Prince of Wales's) D.G.; Second Lieut. C. A. A. Hiatt, Norfolk R.

Flying Officers.—March 28th, 1916: Second Lieut. H. M. T. Lehmann, Essex Regiment, and to be seconded; Second Lieut. W. G. Albu, Princess Victoria's (Royal Irish Fus.), Special Reserve, and to be seconded; Temporary Second Lieut. S. E. Lewis, General List; Second Lieut. J. S. Beatty, Special Reserve; Second Lieut. W. R. C. Dacosta, Special Reserve; Second Lieut. S. F. Heard, Special Reserve; Second Lieut. C. Monckton, Princess Victoria's (Royal Irish Fus.), Special Reserve, and to be seconded.

Assistant Equipment Officers.—Second Lieut. G. C. Burnand, Special Reserve; March 1st, 1916. Second Lieut. J. E. Rendle, Special Reserve; March 30th, 1916.

Supplementary to Regular Corps.—The Christian names of Second Lieut. Lester Edward Taylor are as now described, and not as in the *Gazettes* of Sept. 13th, 1915, and Nov. 11th, 1915. John E. Rendle to be Second Lieutenant, March 10th, 1916.

Second Lieutenants (on probation) confirmed in their rank: W. R. C. Dacosta and Sydney F. Heard. Frederick A. Crispin to be Second Lieutenant (on probation); March 14th, 1916.

The following appeared in a supplement to the *London Gazette* issued on the 12th inst. :—

Memoranda.—Non-commissioned officers to be Temporary Second Lieutenants, for duty with the R.F.C.: Sergt. Norman B. Harris, from Royal Fus. (City of London R.), and Corpl. (Motor Cyclist) Hayden Floyd and Corpl. Eric T. Pruen, from R.E.; March 19th, 1916.

Adjutant-General's and Quartermaster-General's Staff.

Assistant-Adjutant and Quartermaster-General.—Major (Tem. Lieut.-Col.) Cecil C. Marindin, R.A., and to retain his temporary rank whilst so employed, vice Major A. L. Law, R. of O.; March 19th, 1916.

Establishments.

Squadron-Commanders, from Flight-Commanders, and to be Temporary Majors whilst so employed.—Capt. J. H. A. Landon, Essex R. (T.F.); Temporary Capt. C. G. S. Gould, R.A.; and Temporary Capt. G. D. Mills, Notts and Derby R.; March 1st, 1916. Capt. R. G. Cherry, R.A.; March 15th, 1916.

Flight-Commanders, from Flying Officers, and to be Temporary Captains whilst so employed.—Lieut. M. D. Methven, London R. (T.F.), March 1st, 1916; Lieut. E. F. Norris, Special Reserve, March 31st, 1916.

Equipment Officers, and to be Temporary Captains whilst so employed.—Lieut. C. Defries, Special Reserve, from an Assistant Equipment Officer; Lieut. S. A. Currin, Special Reserve, from an Assistant Equipment Officer; Second Lieut. H. Lee, Special Reserve, from an Assistant Equipment Officer; Second Lieut. T. E. St. C. Daniell (incorrectly described in the *Gazette* of Nov. 15th, 1915, as T. C. Daniell), General List; Second Lieut. T. G. Clarson, Special Reserve, from an Assistant Equipment Officer; Jan. 30th, 1916. Lieut. C. P. Ogden, Special Reserve, from an Assistant Equipment Officer; March 25th, 1916.

Flying Officers.—Temporary Second Lieut. T. H. Bayetto, General List; March 12th, 1916. Lieut. W. H. Doré, 32nd (Res.) Canadian Infantry Batt.; Temporary Second Lieut. C. W. Hyde, R.A., and to be transferred to General List; Second Lieut. R. A. Stubbs, R. Muns. Fus., Special Reserve, and to be seconded; Second Lieut. A. Goulding, Special Reserve; March, 28th, 1916.

Supplementary to Regular Corps.—Second Lieut. (on probation) A. Goulding confirmed in rank.

To be Second Lieutenants (on probation), March 20th: A. F. Palmer, E. Stokes and L. E. Wight.

The following appeared in the *London Gazette* of the 14th inst. :—

Assistant Equipment Officers.—Second Lieut. A. E. Oxley, S.R.; Feb. 3rd. Second Lieut. L. A. Sturrock, I.A., R. of O.; March 15th. Second Lieut. A. J. Rickie, S.R.; March 18th. Second Lieuts., S.R., March 30th: E. L. P. Morgan, O. C. Morison, L. Bawn, L. H. B. Cosway, T. Worswick.

Supplementary to Regular Corps.—Second Lieutenants (on probation), confirmed in rank: E. L. P. Morgan, T. Worswick, L. Bawn, L. H. B. Cosway and J. S. Beatty. A. J. Rickie to be Second Lieut., March 18th, with seniority Dec. 27th. C. N. Seemann to be second lieutenant (on probation). March 20th.

The following appeared in a supplement to the *London Gazette* issued on the 15th inst. :—

Flying Officers.—March 25th, 1916: Lieut. H. J. Payn, R.E., Special Reserve, from a Flying Officer (Observer). Temporary Second Lieut. H. Barker, E. York R., and to be transferred to the General List. Second Lieut. S. G. Hodges, Wilts R., and to be seconded. March 31st, 1916: Second Lieut. F. G. S. Williams, General List. Second Lieut. C. T. H. Vaisey, Special Reserve. Second Lieut. F. R. Hardie, 3rd Hrs., from a Flying Officer (Observer).

Flying Officers (Observers).—March 10th, 1916: Temporary Second Lieut. W. H. Davies, K.O. Sco. Bord., and to be transferred to the General List. Second Lieut. J. W. Halcrow, Dorset R., Special Reserve, and to be seconded. Temporary Second Lieut. F. P. Holliday, General List. Second Lieut. E. L. Benbow, R.A., and to be seconded.

Assistant Equipment Officers.—April 4th, 1916: Second Lieuts., Special Reserve, J. R. Frankish and R. Scott.

Memoranda.—To be Temporary Second Lieutenants for duty with the R.F.C.: April 15th, 1916: Pte. Roland Godfrey Hornby, from L'pool R. (T.F.); Pte. Stanley Norman Williams, from N. Som. Yeos. (T.F.); Corpl. Percy Andrew Wright, from 1st Canadian Pioneer Bn.; Lce-Corpl. Leonard Hamilton Stowell, from Inns of Court O.T.C.

steel and is completely separated from crankcase, is forced through a manifold to the centre main bearings by two duplex pumps submerged in the oil, one at each end of the crankcase. Holes drilled in the crankshaft register with holes in bearings, and the hollow crankshaft acting as a manifold distributes the oil to all main and crankcase bearings. From the crankshaft the oil is led to the camshaft, which also has holes drilled in it, distributing the oil to the camshaft bearings and cams.

A small hole in the back of each cam acts to spray oil for lubrication of all tappets and rollers. Oil draining from the camshaft lubricates the timing gears. The oil from all bearings drains to two sumps, one at each end of crankcase, whence it is forced back to the reservoir by the duplex pumps. The oil is then strained before being again circulated through the system. One advantage claimed for this arrangement is that under no circumstances will oil flood the cylinders, and it is not

affected in the least by any angle of flying. A pressure gauge mounted in front of aviator indicates at all times the pressure in the system.

Water circulation is provided by a duplex centrifugal pump having two outlets, each supplying one set of cylinders. The capacity of the pump is ample to provide sufficient cooling water under all conditions.

Carburettor is of the duplex type, designed especially for air work, and the intake manifolds are of aluminium, connected to carburettor by water-jacketed intake pipes. Two "12-cylinder," single spark magnetos are used, providing two complete ignition systems, and each cylinder is provided with two spark plugs of an approved make. So convinced are the manufacturers that this engine meets the requirements of the industry and that it will "make good" that material for five hundred (500) complete motors has been contracted for and much of it is already delivered. They are therefore able to offer almost immediate delivery.

HONOURS.

Russian Decorations for R.F.C. Officers.

In the *London Gazette* of the 14th inst., it was announced that the King had been pleased to grant unto the undermentioned officers His Majesty's Royal licence and authority to wear decorations which have been conferred upon them by His Majesty the Emperor of Russia in recognition of valuable services rendered by them:—

Fourth Class of the Order of St. Vladimir.

Major and Brevet Lieutenant-Colonel (Temporary Brigadier-General) WILLIAM SEFTON BRANCKER, R.A.
Captain and Brevet Lieutenant-Colonel FREDERICK HUGH SYKES, 15th Hussars.

Second Class of the Order of St. Stanislas.

Major (Temporary Lieutenant-Colonel) HENRY ROBERT MOORE BROOKE-POPHAM, D.S.O., Oxfordshire and Buckinghamshire Light Infantry (General Staff Officer, 1st Grade, Royal Flying Corps).
Major and Brevet Lieutenant-Colonel (Temporary Brigadier-General) LEOPOLD GUY FRANCIS MAYNARD GREVILLE, LORD BROOKE, C.M.G., M.V.O., Territorial Force Reserve (Honorary Colonel, 8th (Cyclist) Battalion, Essex Regiment).

Third Class of the Order of St. Anne.

Captain and Brevet Major (Temporary Lieutenant-Colonel)

WILLIAM DAWSON BEATTY, Royal Engineers and Royal Flying Corps (Assistant Director of Military Aeronautics).
Captain (Temporary Major) RUTTER BARRY MARTYN, Wiltshire Regiment and Royal Flying Corps.
Major WILLIAM WARD WARNER, late Indian Army, General Staff Officer, 2nd Grade.
Major WALTER BUCKINGHAM CADDELL, R.A., Deputy Assistant Director of Military Aeronautics.

Further War Honours.

In the list of Honours issued in the *London Gazette* of April 14th, it was announced that His Majesty the King had been graciously pleased to confer the Military Cross on the undermentioned officer in recognition of his gallantry and devotion to duty in the field:—

Captain ERIC MACKAY MURRAY, Queen Victoria's Own Corps of Guides, Indian Army (attached Royal Flying Corps).

For conspicuous gallantry and determination. He has flown continually in all winds and weathers, and carried out many daring reconnaissances with great skill.

In a supplement to the *London Gazette* issued on the 16th inst., it was announced that the Military Cross had been conferred upon

Captain THOMAS RALPH WELLS, 33rd Punjab, Indian Army, and R.F.C.

THE ROLL OF HONOUR.

The Secretary of the Admiralty announces the following casualties:—

Previously reported Missing, now reported Prisoners of War in Germany.

Flight-Lieutenant George H. Reid, R.N.
Flight-Lieutenant John F. Hay, R.N.
Flight Sub-Lieutenant Cyril G. Knight, R.N.
Midshipman Stanley E. Hoblyn, R.N.R.

Under date January 12th:

Previously reported Missing, now reported Killed.

Flight Sub-Lieutenant James S. Bolas, R.N.

Under date April 11th: Injured.

Wing-Commander Eugene L. Gerrard, R.N. (Lieutenant-Colonel, R.M.L.I.).

The Navy League and a Board of Aviation.

HAVING decided that the establishment of a Board of Aviation, with full executive powers and under the direction of a Minister with a seat in the Cabinet, has become a national necessity for the successful prosecution of the war, the Executive Committee of the Navy League, in order to give expression to public opinion on the

The following casualties have been announced by the War Office:—

Killed.

Second Lieutenant W. N. Thomas, Royal Flying Corps.
Captain R. L. Annes, N. Staffs Regt.

Wounded.

Captain H. J. Segrave, Wilts Regt., attached R.F.C.
Lieutenant C. A. Brooks, Wiltshire and R.F.C.
Captain I. A. J. Duff, Dorset, attached R.F.C.
Lord D. C. Moncrieff, R.F.A., attached R.F.C.
Second Lieutenant H. S. Robertson, Royal Flying Corps.
Captain D. E. Stodart, Royal Flying Corps.

Missing.

10805 2nd Class Air-Mechanic E. E. Coleman.
1941 1st Class Air-Mechanic A. Walker.

Died.

3259 2nd Class Air-Mechanic A. Burns.

urgency of this question, has arranged a public demonstration to be held at the Queen's Hall, Portland Place, W., on Friday, April 28th, at 2.30. The chief speaker will be Lord Montagu of Beaulieu who will be supported by members of both Houses of Parliament and other public men representative of all political parties. This meeting will be followed by public meetings in the large cities throughout Great Britain.

The Royal Aero Club of the United Kingdom

OFFICIAL NOTICES TO MEMBERS

Easter Holidays, Good Friday, the 21st, to Monday,
the 24th April, 1916.

THE Club will be open each day during the Easter Holidays from
9 a.m. till 7 p.m.

THE FLYING SERVICES FUND administered by THE ROYAL AERO CLUB.

THE Flying Services Fund has been instituted by the
Royal Aero Club for the benefit of officers and men of
the Royal Naval Air Service and the Royal Flying Corps
who are incapacitated on active service, and for the
widows and dependants of those who are killed.

The Fund is intended for the benefit of all ranks, but
especially for petty officers, non-commissioned officers,
and men.

Forms of application for assistance can be obtained
from the Royal Aero Club, 166, Piccadilly, London, W.

Subscriptions.	£	s.	d.
Total subscriptions received to April 12th, 1916	10,613	12	0
Collected at the Westland Aircraft Works, Yeovil (Twenty-eighth contribution)	...	0	7 6
Total, April 17th, 1916	...	10,613	19 6

166, Piccadilly, W. B. STEVENSON, Assistant Secretary.

FROM THE BRITISH FLYING GROUNDS.

London Aerodrome, Collindale Avenue, Hendon.

Grahame-White School.—Straights with instructor
last week: Messrs. Burrell, Nadin, Rabourdin, Sloden,
Smith, Timmis, Hillaby, Parkinson and Phillips. Circuits
and eights with instructor: Messrs. Leigh, Henshaw and
Williams S. Circuits alone: Messrs. Holman, Kryn and
Sandys.

Brevets during week: Mr. Baragar and Flight Sub-
Lieut. McHardy.

Instructors: Messrs. Biard, Hale, Manton, Pashley,
Winter and Russell.

Beatty School.—The following pupils were out during
last week: Messrs. Dunne, d'Allesina, Mossop, Patterson,
Sellars, Parsons, Jones, Martin, Roberts, Knox, Smith,
Phillips, Stanley, Tjaarda, Brewerton, Ching, Whitmore,
Hick, Skeet, Dowding, Davy and Gaskin.

The instructors were Messrs. G. W. Beatty, W. Roche-
Kelly, G. Virgilio, R. W. Kenworthy, L. L. King, H.
Sykes, A. E. Mitchell and H. Fawcett; the machines in
use being Beatty-Wright dual-control and single-seater
propeller biplanes and Caudron dual-control and single-
seater tractor biplanes.

London and Provincial Aviation Co.—Pupils rolling
last week: Messrs. G. H. Foley, H. Garnett, G. Quayle,
C. Crawford and W. Evernden. Doing straights: Messrs.
A. Dawson, W. Egelstaff, A. L. Rimer, T. Aldous, L.
Pulford, P. de Goussencourt, F. Moore and W. Hay.
Circuits and eights: Messrs. H. Archer, A. Ferris, G. F.

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Compensation for Air Raid Damage.

DESCRIBED as a municipal parliament representing directly
elected authorities administering the local affairs of upwards of
11,000,000 people, a large meeting of representatives of public
bodies from all over the country was held on the 13th at the Guildhall,
under the auspices of the Committee on War Damage. The chair was
taken by the Lord Mayor of York (Mr. Foster Todd), and the fol-
lowing resolution, proposed by the Mayor of Gateshead and
seconded by Mr. Alderman Alltyd Thomas, of Cardiff, was
unanimously passed:—

"That this meeting hereby reaffirms the resolution passed at the
Whitehall Rooms on October 28th last, viz.: 'That in the opinion
of this meeting the Government scheme for insuring against loss or
damage by aircraft and bombardment, which has made individual
citizens responsible for war damage inflicted on them by the enemy,
is manifestly unjust, and it is hereby agreed to present a memorial
to the Prime Minister urging the abandonment of the scheme, and
(1) the adoption of an Act recognising national responsibility, or (2)
revert to the policy adopted in connection with the Zeppelin raids

Creaghan, C. Verbessem, M. Vilain XIII and P. H.
Houba.

Instructors: Messrs. W. T. Warren, M. G. Smiles,
G. V. Aimer and W. T. Warren, jun.

Royal Aero Club certificates taken by Messrs. H.
Archer, P. Houba, C. Verbessem, M. Vilain XIII and
Lieut. A. Ferris.

Ruffy-Baumann School.—Pupils with instructor
last week: Williams, Thomas, Maya, Portela, Torres,
Westlake, Winter, Hoskyns, di Balma and Bailey.
Straights: Wood, Cox, Muspratt, Portela, Maya, Baron
d'Opstael and Van Haverbeke. Eights and circuits:
Baron d'Opstael, Van Haverbeke, Cox, Wood and
Muspratt.

Instructors: Messrs. Ed. Baumann, Felix Ruffy, Ami
Baumann, Clarence Winchester and Andre Thomsen.

Machines in use: 50 and 60 h.p. Ruffy-Baumann
tractor biplanes.

Bournemouth School.

Pupils rolling last week: Messrs. Adamson, Kennedy,
J. L. Barlow, Brandon and Gorvin. Doing straights
alone: Messrs. Smith, J. Wilson, O. Wilson, Morley, W.
Mouton, G. Mouton and Morris. Half-circuits alone:
Messrs. Simpson, Dubois, Meeus and Devos.

Instructors: Messrs. King and Summerfield.

Although the weather was very unfavourable during
the week quite a lot of flying was got in.

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on the East Coast and the bombardment of Scarborough and
Hartlepool prior to the introduction of the insurance scheme, and
compensate sufferers out of national funds, a condition of the with-
drawal to be that the premiums already paid under the scheme
should be returned."

At the annual meeting of the Association of Municipal Corpora-
tions on the 14th, when Lord Derby was re-elected President, a
resolution was passed, on the motion of Mr. Councillor Stone
(Canterbury), seconded by Alderman Allen (Croydon), to the effect
that the expense of damage caused by hostile aircraft should be borne
nationally, and it was decided to ask the Prime Minister to receive
delegates at the same time as another deputation which was about
to wait upon him on the same subject.

Easter at Hendon.

ARRANGEMENTS have been made for special flying displays
to be given at Hendon during the Easter Holidays. On Friday,
Saturday, Sunday and Monday, weather permitting, there will be
flying each day, commencing at 3 p.m.

AIRSHIPS

By R. P. HEARNE.

It is not without interest at the present time to collect the main groups of opinions on our airship policy. This policy, I may point out, has been forced upon us more or less by the Zeppelins, and we are therefore unwilling partners to it in most cases. For this and other reasons it is more complicated than the matter of aeroplanes. The authorities and the public have accepted the aeroplane: they are still vacillating about the airship.

Airship Policies.

Considered with regard to Zeppelins, we may classify current opinions thus:—

(1) Disregard the Zeppelin as a negligible quantity: have no special defence against aircraft in this country: put every possible man, aeroplane and gun into the battle area in France.

(2) Trust entirely to aeroplanes; build them by the thousand; raid Germany and destroy Zeppelin harbours and works.

(3) Develop the present Government plan of mounting guns around every important centre in this country; employ aeroplanes to some extent, and divide the work of defence between War Office and Admiralty.

(4) Create an Aerial War Department; lay down Zeppelins; organise and develop aeroplane construction on a grand scale; work out aerial strategy; and by combined offensive and defensive methods on scientific lines gain supremacy in the air by day and night.

Plan No. 1 is generally held by comfortable people who live well outside the danger areas, and who are callous to the sufferings of others. To leave this country undefended against air raids would be as stupid as to give up our efforts against the German submarines.

The second plan, which is that urged by Mr. Billing, pre-supposes that we can now build military aeroplanes with a range of action which will bring them far into Germany with a useful load of ammunition. They must also have a speed and climbing power which will give them reasonable security against anti-aircraft guns, and our Secret Service must know the exact location of the new air harbours and works which Germany has built since August, 1914.

Raids on Germany.

Here we have technical, geographical, and military difficulties to contend with. Germany is not carrying out this war on German soil. Portions of France and practically all Poland and Belgium stand out as buffers, and over these lands the Allied airmen must travel ere they get into Germany proper. We must not forget that the early raids upon Cologne were made before Antwerp fell into German hands; and the other notable raids on Friedrichshafen and Karlsruhe took place over the German lines at a time when their anti-aircraft guns and their aeroplanes were not so effective as now.

It is quite certain that any existing Ally aeroplane equipped with ammunition and fuel for a long distance raid could not possibly outpace the fastest of the German local defence aeroplanes, nor could the raiders climb swiftly with their great load to the heights which modern gunnery have made desirable. Until Mr. Billing can evolve a super-plane with greater speed than a Fokker, with a range of action of at least 500 miles with

full load, with climbing power equal to the best military machine of to-day, and with a munition load equal to the best short distance raider at present known;—until these and many other points can be attained it must be set down that raids deep into Germany are not feasible. This super-machine may be produced within a few weeks, or it may not materialise for years. At present it does not exist.

I agree with Mr. Billing that small and spasmodic raids are of no avail, and I trust that he can hasten on development in aeroplanes so that the super-raider can be produced which will give us raiding power all over Germany. But hitherto France, Germany, and Britain have not been able to turn out a really effective long distance aeroplane raider. If it had been possible we would have seen far more daylight raids made upon this country by the Germans.

The Zeppelin Actuality.

Here it is that the Zeppelin scores. It actually has a range of action which is more than twice as great as that of the average military aeroplane in war trim. It can set out at night and thus operate at a time when land defences are least effective. Hence Germany possesses in the Zeppelin a raiding instrument which brings all France and Britain under her range, whilst neither France nor Britain has any aerial vessel by which all Germany can be raided. Germany has the actuality: we only have the dream.

Distinguished critics like Mr. Lanchester may argue that in twelve months or so the Zeppelin will be superseded by the aeroplane, but, in war, twelve months comprise a very long period. What a tragedy it would be if in the meantime Zeppelins bombed the author's undefended house! A war is not won on theories or by unmade weapons. The issue is decided by the men and the weapons at hand. Until the aeroplane appears, which in night-flying power, in range of action, in load capacity, speed and climbing power is superior to the Zeppelin, we must argue that it is very dangerous to allow Germany a monopoly in Zeppelins.

Years may pass before this super-plane may come about; but it is immediately possible for us to build Zeppelin-type airships which will be practicable. Count Zeppelin's first ship, built sixteen years ago, was a practical ship, which would be more useful to us to-day than any airship we possess. Is not this a shameful position for a great engineering nation to admit?

Broad Policy Needed.

Mr. Billing has made another regrettable mistake in declaring that it was foolish to build airships. He should take example from Lord Montagu in adopting that broad policy which is so essential if we are to secure general progress in aeronautics. If Germany can build Zeppelins, surely we can do so as well. If Germany can utilise her Zeppelins for sea scouting in a manner which is impossible for seaplanes, surely it is vitally important for us to get level in this respect. We are approaching a critical period in aerial affairs, and our experts and spokesmen must weigh their words carefully. We have had too much narrow partisanship for one or other branch of aerial science, too much of the "departmental spirit" outside as well as within the Government.



THIS morning it became necessary for me at a given hour, as it becomes necessary six mornings in the week, to leave for the office. An umbrella-ring is not an article of such grave importance that it should upset a man's sense of proportion to the extent that he work himself into a pother over the loss of it; yet we know well enough that such trifling circumstances do give us great annoyance, and vex us unnaturally.

Why is it these petty happenings tease us out of our ordinary patience? I cannot attempt to explain the workings of the human mind. Great writers on metaphysics have attempted the explanation; philosophical works bring us but a glimmering of understanding. Hume, so long ago as late in the eighteenth century, published his *TREATISE ON HUMAN NATURE*, yet, as he himself tells us, it "Fell still-born from the press."

The great and the little have no doubt their places and really exist in the nature of things, yet the smaller happenings are the ones which annoy us most. Is it because they catch us all unprepared? We are prepared for the big things in life; they are of our daily thoughts. We are conscious of their proximity, of their likelihood to happen for good or ill, and we take due measures. Fortunes are made and lost, stocks rise and fall, men succeed and fail, and because we know of these things as part of life and living, we take them stolidly.

We can tabulate the facts and work out conclusions, seeing clearly that events might easily have terminated otherwise had certain things been done or left undone, but an umbrella-ring left on an umbrella at night should be there in the morning, unless somebody has taken it off. It is unexplainable; we cannot argue it out to a logical conclusion acceptable to our understanding, and we come to loose ends and lose our equanimity in extent out of all proportion to the trouble.

There can be no shadow of a doubt in the mind of any man in this country that we are fighting for our very existence. That being so, every man should be doing his uttermost to help on to a glorious victory, for in the great things, what greater can there be than life itself? And if every man having power in the administration of our resources for attack and defence were asked, he would tell that it is so, that we are of but a single mind, that all that can be done is being done, yet it would appear otherwise.

I do not go all out for Parliamentary Reform, yet it would seem as if Parliamentary Reform were the only solution. Parliamentary Reform may be a very good thing, a very good idea, so far as I know. It has been the one thing shouted for adown the ages when trouble was afoot, yet it presents itself to me as having never made very much difference when it has come about.

The men in power know quite well what is wanted, how could they do otherwise? Yet on the face of it, it

would appear that they are all set, one against the other, to thwart, to bother, to worry, to vex. It creates the idea that each and every one wants to win the war, but thinks to win it single handed, and by his own methods, disdaining the help or suggestions of others. How is it, otherwise, that, for instance, such men as Pemberton Billing have to fight tooth and nail to get so much as a straightforward answer to questions of moment? It would certainly seem that Lord Derby and Lord Montagu have resigned from the Joint Air Committee because they see the impossibility of doing any good by remaining.

Whatever can be said for or against the present Government, I cannot regard it as a business Government. I cannot conceive any one of our great stores being run successfully by a board of directors working on the methods of our Government, yet the business of running a nation successfully must surely be one of greater moment, and one calling for greater unity of purpose in its directors.

Nevertheless I am obliged to wait and see. I am obliged to have faith, and to believe blindly. It is conveyed to me as one of the great British public that all is well, that it is not for me to attempt to inquire into the workings of the mighty minds of the men at the helm; that the petty differences of opinion of which I am allowed to read in the daily press have no substantial foundation, no real existence, and are but the glimmering reflections of the great work being done beyond the horizon of that which it is permissible to make public.

Yet these small matters vex me because they are beyond my understanding, even as the questions of Mr. Billing vex those to whom they are put. Not all the questions of "P.B." are material in the fact that the answers to them are essential, but they all matter as little things that vex, and it is only by vexing by a continual bombardment of questions, backed up by a serene and unperturbed temper when receiving evasive answers, or no answer at all, that he may hope to become one who MUST be taken notice of.

I was more put about by the loss of that umbrella-ring than I might have been over something of far more importance, because it had no right to happen. The House is much put about by "P.B." because he ought never to have happened, and he would not, could the ruling "party system" have prevented it, and it is one of the small things that vex. Little things unexpected, and continually happening, break down the serenest composure, even as the little drops of water wear away the stone. The thing most evident to be done is to stop the water.

Women, with all their lack of logic, have an infallible remedy with fastidious husbands in "Feed the brute." I hope, and think, that "P.B." is not of the sort that can be quieted by feeding, yet I feel sure it will be tried. They will find him a job. And if "P.B." is the man of our opinion, he won't take it.

A DUTCH CIRCUIT,

SOME time ago it was pointed out in these columns how many small neutral states are beginning to devote a considerable amount of money to the development of an air service. This is only natural in view of the immense importance aerial warfare has assumed. Besides, even the smallest of countries can afford to buy or build a number of aeroplanes even if they cannot afford an army or a navy. News has been received recently of a



Her Majesty the Queen of Holland inspecting one of the Dutch military machines.



Lieuts. Palthe and Cramwinckel, who were the first to arrive at Scheveningen in the Dutch Circuit in their machine, decorated with a wreath presented by the Spyker works.

very good start made by Holland, in which country a fair number of machines are already in use. So far as it is possible to learn, the majority of these are of the H. Farman type and are built by the Spyker—or, to put the name in the Dutch spelling, Spijker—works, the



The machines lined up for the start of the Dutch Circuit.



A view of Breda, with the Royal Dutch Military Academy.

THE AIR SERVICES IN PARLIAMENT.

Alien Property and Air Raid Compensation.

THE Chancellor of the Exchequer, in reply to Mr. Butcher on April 13th, said the approximate estimate of the value of property belonging to enemies or enemy subjects which had been vested in or received by the custodian was as follows:—England and Wales, £8,122,000; Scotland, £584,000; Ireland, £38,000. He was unable to adopt Mr. Butcher's suggestion that all damage caused in this country by air raids should be made good out of this property.

German Airship Prisoners.

MR. TENNANT, replying to Mr. Billing, stated that the captured officers and crew of the Zeppelin which foundered in the Thames Estuary were regarded and treated precisely as other prisoners of war.

Firing of Anti-Aircraft Guns.

MR. TENNANT, replying to another inquiry by Mr. Billing as to the duties and responsibilities of officers commanding anti-aircraft guns, said that there is no conflict of opinion as to the duties of officers commanding anti-aircraft guns. The nature of the orders under which these officers act cannot in the interest of the public be made known, except to say that all the officers in charge of guns have the most stringent orders to fire at hostile aircraft whenever they have any chance of hitting them. In the event of an anti-aircraft gun failing to fire, the officer in charge of the gun is alone responsible.

The Air Services Inquiry.

REPLYING to Mr. Billing, Mr. Asquith said that the terms of reference to the Committee of Inquiry will be as follows:—To inquire into and report upon the administration and command of the Royal Flying Corps, with particular reference to the charges made both in Parliament and elsewhere against the officials and officers responsible for that administration and command, and to make any recommendations in relation thereto. The names of the committee will be announced as soon as possible.

Mr. Asquith further stated that the inquiry would take place with all possible promptitude.

Zeppelin Raid Casualties.

MR. BILLING also asked the Prime Minister whether it was with the sanction of the Government that the actual number of deaths from Zeppelin raids had been withheld from the public; and could he give an assurance that in future there should be no attempt to conceal the total casualties.

MR. ASQUITH: The numbers of deaths from Zeppelin raids have never been concealed. The exact figures are carefully collected by the police and are published in full. The numbers are often increased by deaths from wounds, and in such cases revised figures are published. I must express my surprise that the hon. member should have thought fit to make the allegation contained in the first part of the question.

MR. BILLING asked whether the Prime Minister wished him to give the facts upon which he had based his question.

MR. ASQUITH: I have given my answer.

The Government and Civilian Schools.

REPLYING to Mr. Billing in the House of Commons on the 10th inst., Mr. Tennant said: "Principals and instructors of civilian schools of aviation will be called up under the Military Service Act and where possible placed in the Royal Flying Corps, if unmarried and not attested, unless they have received certificates of exemption or have applied for exemption to a local tribunal."

aviation department director of which is the well-known Dutch aviator Henri Wijnmalen. A short time ago eight of these machines manned by pilot officers were flown in a circuit race starting from Soesterberg and going, *via* Gilze-Rijen-Scheveningen, back to Soesterberg again. One of the accompanying photographs shows the first pilot to arrive at Scheveningen, with his machine decorated with a wreath from the Spyker works. A visit was paid to the aerodrome by Her Majesty the Queen of Holland, who was greatly interested in the machines, several of the officers being presented to her.

Apart from "circuits," the Dutch military aviators are doing a good deal of cross-country flying *en escadrille*, and where, a few months ago, a single machine was seen, now several may often be seen in flight. One of our illustrations shows a view of Breda from above. This photo. was taken during an escadrille flight made by seven machines, under the leadership of van Heyst.

MR. BILLING: "Does the right hon. gentleman refuse to give an assurance to these civilians that they and the good work they are doing shall be recognised? Could they not be given some assurance in carrying on this work, which is of great value to the country?"

MR. TENNANT: "It depends upon the value of the work being done. If it can be proved that they are doing good work, then I can give the hon. gentleman the assurance for which he asks."

A National Policy on Aviation.

ASKED by Mr. Brookes, on the 11th inst., whether the Cabinet had considered the future air policy of the country as a whole, apart from the requirements of either the Army or the Navy, and, if so, what decision had been arrived at?

THE PRIME MINISTER said: "I cannot agree with my hon. friend that it is possible to consider this problem apart from the requirements of the Army and Navy." His Majesty's Government give, as is their duty, constant attention to this as to all other problems arising out of the war."

Flying at Upavon.

REPLYING to Mr. Brookes, Mr. Tennant said that flying at Upavon was possible on 17 days in February and 26 days in March.

The Joint Air Committee.

IN the House of Commons on April 11th on the motion for the adjournment, Mr. Pemberton-Billing called attention to the resignations of Lord Derby and Lord Montagu from the Joint Air Committee, and asked whether any importance was attached to those resignations. He asked the Prime Minister what he proposed to do. Did he propose to offer another name to the public? Did he propose to further postpone the necessary and very urgent enquiry into the actual position of the air services. He asked the Prime Minister to abolish this committee, and to appoint in its place a board with powers to act, to try to inquire into all the allegations he had brought against the services and the conduct of these services—not to constantly postpone and put it off until the general interest had evaporated—and get on with the question of developing the Air Services, which, undoubtedly, if not of the very greatest importance to-day, will be of very considerable importance in the immediate future. He did not think that the joy bells of Berlin would ring so loudly when they saw us taking this air menace seriously as they would if they see us continuing to fool with it as we have been doing up to now. The time for further talk across this floor on the question of the Air Service was almost at an end, unless some definite action can be taken. We have plenty of aeroplanes in this country to act. He was promised in the House the other evening that he should be asked to advise, to act, to organise, and, if necessary, to lead some definite action against our enemies. Since then he had heard nothing further. Valuable days were being wasted. He protested most fiercely against the total indifference, the regrettable indifference, and the insult which the Government was offering the people in the way they were dealing with the question not only of the air defence of our country, but of the air war generally, so far as it has reference to the progress which our enemies are making in the air compared with the efforts we are making.

As apparently notice had not been given in proper form that the question was going to be raised, the Minister responsible was not present, and no answer was given on behalf of the Government.

LORD MONTAGU AND OUR AIR DEFENCE.

On the 12th inst., Lord Montagu made an important speech at Birmingham, in which he dealt with his ideas upon the need for the entire re-organisation of the Air Service, which he is desirous of seeing under the direction of a Board of Aviation. He also gave his reasons for resigning his seat on the Air Co-ordination Committee, and it transpired that Lord Derby's secession from that Committee was for the same reasons. Lord Montagu's speech was made in the Birmingham and Midland Institute, a very large audience under the chairmanship of the Lord Mayor of Birmingham listening with rapt attention to his remarks. Amongst those present were Rear-Admiral Grant Dalton, Brigadier-General Townley, Brigadier-General Sir John Barnsley, Sir Oliver Lodge, Mr. Jesse Collings, M.P., and a goodly number of the mayors of Midland towns.

The Bishop of Birmingham, in a letter read to the meeting, said that for a long time there was culpable negligence and quite unnecessary ignorance in this country on the question of air defence, and it was due to men like Lord Montagu, who braved unpopularity in order to instruct us, that we were now on the high road to improvement.

The Lord Mayor said that as a result of the air raid over the Midlands the reflection had arisen that it was a humiliation for England that we should have to endure attacks of that kind and be helpless to hit back. It was brought home to them that supremacy in the air was as essential as supremacy on the sea, and accordingly they had been very anxious to have some assurance that our rulers—who at that time did not appear to have evolved anything in the nature of an air policy—had now got a policy and were taking steps to carry it into effect. They were grateful that Lord Montagu had chosen Birmingham as the place for his first public pronouncement since his resignation, because they hoped Lord Montagu would tell them why he had resigned and would lay before them the steps which in his opinion were necessary to put the air service on a satisfactory footing. He held that the mastery of the air had become absolutely essential for our national security. The genius of our engineers, the skill and daring of our airmen were not surpassed in any other country. They only wanted an opportunity to show what they could do, and he had no hesitation in telling Lord Montagu he would have the support of that important and influential section of the country in the efforts he was making, and, they hoped, he would continue to make, until he had restored to us the mastery of the air which was becoming absolutely essential for our security.

Lord Montagu said it had been suggested that he should state fully and frankly what led him and Lord Derby to resign from the War Air Committee. He trusted that he would not say anything which would help the enemy, and he did not wish to do anything which would be to the detriment of the great cause or would embarrass the friends of that cause whom he knew to be in the Cabinet. He asked his audience, however, to consider whether he was not right in demanding that the present system of divided administration for the air service should be replaced by a unified system, and to say whether it was possible to go on with the Navy and Army at cross-purposes with no definite air policy, and with increasing danger from the air to the people who lived within these islands.

When I was invited by the Prime Minister (Lord Montagu continued) to join the War Air Committee I felt that because I had been a critic I was all the more bound to help if I could, and people who criticised me at the time for joining the Committee did so perhaps rather light-heartedly. I joined the Committee with high hopes. I thought it might become, and Lord Derby had assured me that there was a chance of its so doing, the nucleus of a Board of Aviation, the foundation upon which there might be built a Ministry of Aviation. I thought it meant more than its limited terms of reference seemed to imply. But when I had sat on the Committee during a few meetings I discovered that it had practically no real power at all, and that no decisions could be come to unless all the members on it were unanimous. It could forward no recommendations unless the representatives of the Navy and Army entirely agreed, and I could see at once that it was unlikely if any criticism was put forward, or any comment upon the two services, that you could ever get a unanimous decision.

The Committee had no executive power, and though I believe it was put forward in good faith, I felt, and Lord Derby felt, that it was perhaps lulling the public into a sense of false security, and I for one was determined not to be made use of in that manner. After a time, I do not think I am guilty of a breach of confidence in saying, we came to the question of making an interim report. We were quite unable to agree on the terms of that report, and gradually both Lord Derby and myself came to see that the only fair and honest thing was to resign, and ask the Government if they wanted anything done to appoint some real body—call it a Board or Ministry or what you like—that could be of real service in solving these great problems. Thus I resume my complete freedom of

action and come down here to-day to lay my case before you in this great centre of England.

I do not know whether the belief still holds that an inland town is less liable to danger than a coast town, but let me tell you that you live here barely 300 miles from the nearest Zeppelin shed, and are just as likely to be attacked as though you lived at Dover or Yarmouth. There is no part of industrial England to which a Zeppelin could not fly and rain destruction. The more important the district the more likely you are to be attacked. I have pointed out over and over again in the House of Lords and in the public Press that this danger was coming, and I do not think it needs anyone to convert you to the belief that we must do something to avert the danger.

After tracing the progress of flight since 1908, Lord Montagu said that to-day we were not doing enough scientific thinking. This could not be helped in war. It was one of the inevitable consequences of having to make up for lost time. Years ago many of them had warned the Government of the seriousness of the question, and he believed that in this, as in many things, the people of the country were far ahead of Parliament, and Parliament was ahead of the Government. He was certain that on this matter the heart of the country was as sound as it could be, and that there was no wish for any delay in coming to a decision. In this war the power of defence had grown so largely that it had largely stopped offence. This could only have one result. On the sea it would drive warfare into the sphere of submarines, and on land it would drive it into the air. Warfare would be driven into new channels, and we were now only at the beginning of that struggle. We still had time to make up for the neglect of the past. There was still time while the war was going on to found what he would call an Imperial Air Service, for he wanted to take the Dominions in as well.

To-day we had no airships to act as eyes for our Fleet. The German Fleet had Zeppelins spread over the North Sea, but we had only a few seaplanes and our magnificent service of destroyers and submarines. A navy that had a chance of seeing your strategic arrangements from a distance of 70 to 80 miles had an enormous advantage over a navy that did not possess eyes of that kind. He did not think our rulers could be acquitted of negligence in not having foreseen that point. In the case of the Army, after 20 months of war our fighting planes were not so fast as those of the Germans or of the French, and he believed the Russians, too, were in some ways ahead of us. The fact that we had the supremacy of the air at the beginning of this great fight made it all the more deplorable that we should have lost our supremacy. He knew there were good machines on the stocks, and that steps were being taken to remedy defects, but why should there be this hiatus in between? The Government on the whole were responsible for the defects.

Then he came to our own shores. At the beginning of the war he for one warned the authorities of the danger of Zeppelin attacks. He foresaw that these great monsters would come over, and that, so far from being a subject for laughter, they were going to be a very serious menace. In the first few months of the war no Zeppelins came, and the whole thing was neglected. Now we had had 27 or 28 raids, some of them very serious ones, and these raids would not only be repeated, but they would become more serious as time went on. In the 20th month of the war we had just begun to have a system of anti-aircraft defences in this country. He was not going to reveal secrets, or talk about dummy guns, but he would say that there was hardly a town, with the possible exception of London, which could be properly defended to-day against attacks from Zeppelins. Our anti-aircraft corps, like our pilots, included many gallant fellows, skilled men, and able commanders, but what could they do with guns that were too small and preparations which were inadequate? It was almost incredible to him that things should have been left so long in this direction, as in others. It must have been well known to the Government that we were running this risk. The people in the Midlands had courage, and were not going to squeal because they were bombed, but they had the right to complain that they were forced to sit inactive and that they could not hit back. It was the feeling of helplessness which was hated, and they were right to hate it. They would not be Englishmen if they did not.

He would like his audience to realise the truth of the phrase "One element one service." Was it possible to go on running the air defence of the country or an air offensive by two departments, sometimes three, without any link between them, and with traditional jealousies existing between them? The curse, for it was a curse, of all Government departments was that of thinking departmentally instead of nationally. A few days ago he turned round to certain representatives on the War Air Committee and asked if it was not time that they dropped phrases about competition between services and had more co-operation. If circumstances demanded

the recasting of some of our administrative departments, he for one said that no departmental difficulties should stand in the way of national necessities.

He knew there was an argument that if they set up a Ministry of Aviation, instead of the Navy and Army having their little tiffs there would be a third department to quarrel with, and that would be a bad thing. If, however, they put into the Ministry of Aviation men of ideas, and, he hoped, also, men of tact, though there would be great difficulties, these were not to be compared with the danger of leaving things as they were. When the Ministry of Munitions was first established there was a very tough fight with certain departments of the War Office, but the great point was that Mr. Lloyd George formed the department and got the stuff, millions and millions of rounds, and thousands of guns. It was something of the same kind he wanted to see established with regard to aviation.

He had submitted a scheme to the Cabinet, and before disclosing the details of this it was only fair to give the Cabinet a chance to consider the proposal. He could say, however, that he did not wish to interfere with the executive control of their aircraft by either the Commander-in-Chief of the Army or the Admiral of the Grand Fleet. His first object if he should induce the Government to establish a Board of Aviation would be to secure a body which would hand over trained men and complete machines for the Army and Navy. The Department would deal with design, construction, inspection, supply, contracts, scientific research, and the enlistment, training, and allocation of personnel.

The question of the air was so important that in the wars of the future it would be a case of go up or go under. They could interpret that as they liked. There were people who said that the changes he urged should not be made in war time. When people were opposing a scheme they nearly always found a proverb to fit their case. Was there any great difficulty in bringing about some united administration? The real difficulty which the Government thought would occur was purely a departmental difficulty. When they were trying to amalgamate two great commercial companies

where did the opposition always come from? From the administrative staffs and not from the shareholders. The people were shareholders in the British Empire, and opposition in regard to this matter did not come from them.

Returning again to the neglect of the air service—which, he said, was treated before the war very much like a baby which nobody wanted—Lord Montagu referred to the munificent prizes offered by Lord Northcliffe for the encouragement of aviation. Lord Northcliffe, he said, did more than any man at that time to help on the study of the subject. Things drifted on, however, until the war came, and then suddenly people began to wake up to the importance of it all. Now every one was trying to get the control of aircraft in their hands. He thought that neither the Army nor the Navy should have control of it. They must have some new Department created which would not have within its walls the rivalries and jealousies of the past. Only in that way would they be able to build a sufficient number of aircraft, and train up enough pilots to make us supreme in the air when the terms of peace were being discussed. If the objection was raised that this claim must not be pressed because this or that man would resign, he was prepared to face the resignations.

In the light of his experience, he said that we could not go on with the present divided administration. The administration must be united. We must have a strong air policy or else this country would suffer far more than it would otherwise do in the coming months of the war. At the present time lives were being sacrificed, money was being spent, and time was being wasted while we kept on considering the problem. Action was needed. He had faith in his cause, and because he had that faith he had no fear for the future.

Lord Montagu, in responding to a vote of thanks, said he would leave with them one more thought. All the expenditure of this war upon munitions would largely be wasted with regard to the future of humanity; but the expenditure upon these problems of aviation would help the future and help humanity.

ANOTHER SPEECH BY LORD MONTAGU.

SPEAKING at Brockenhurst on Saturday, Lord Montagu said that up to now there had been a good deal of abuse of the enemy, but it was deeds and not words that would win the war. The preliminary to peace must be the unconditional surrender of the Germanic Powers. He was not going to abuse the Government in general terms. The Government were doing their best, but probably it was a case of too many cooks spoiling the broth. When twenty-three eminent gentlemen, anxious to do their best, tried to come to a decision at once it was hard to come to any decision at all.

Lord Montagu went on to refer to the state of deadlock which existed on the Western front, in the North Sea, and at Kut, and said that in all these cases, if we could have provided beforehand, by some magic wand, a sufficient number of aircraft, the state of stagnation could have been removed. At Kut we have been constantly able to communicate with General Townshend, and we have been able to drop him a small amount of supplies. If we had had an airship in Mesopotamia or a really large number of aeroplanes, his power of resistance could have been prolonged, and he might have been saved. When we could not get through by land we might have paralysed the enemy from the air, and in course of time have produced a sense of terror among the Turks.

Lord Montagu further instanced the defence of Verdun, where the enemy were unable to get through, notwithstanding the use of immense numbers of men and unlimited supplies of ammunition. There, again, if our Allies had had a sufficient number of aeroplanes, the enemy's communications might have been paralysed and his offence enfeebled. In the use of aircraft the last straw would have been found which would have led to victory. Towards the end of the war, when the forces of offence and defence would remain very much equal, it would be found that the submarine in the case of the sea and aircraft in the case of the land would just make the difference between victory, defeat and a drawn war.

Referring to his resignation from the Joint Committee, Lord Montagu said that he must say this about the Committee that, try as they would, they could not have done much under their present limit terms of reference. After all, in a Committee of that kind, if a conclusion was come to by the chairman and the only other member of the Committee, who was not concerned in playing for his own cause, either the Army or the Navy, as the representatives of the Admiralty and the War Office were—if Lord Derby and himself came to the conclusion that they could not, with honour or profit to themselves or the nation, go on, there was fairly good testimony to the fact that something better than that Committee was needed, and that it would have been folly to proceed with their deliberations.

"Aviation is not only of national, but of Imperial importance. Instead of having a few hundred planes with a personnel of 1,000 or 2,000, we have now an immense service partly controlled by the Admiralty and partly controlled by the War Office. You have divided administration with all its attendant evils. For instance, lately there were a good many things in connection with aviation being manufactured for us in France, and up to a short time ago there was competition for them between the Army and the Navy—both services buying for this country—to such an extent that prices were very materially advanced against both of them. It may be a small matter, but that is only an instance of the duplication and waste. There are analogous instances in the cases of contracts, designs, and inspection.

"We cannot go on in this fashion. Therefore, I say that though committees may do some good you must have without delay a Board of Aviation, which shall have, at any rate to begin with, the whole of the supply side in their hands. Sir Douglas Haig and Sir John Jellicoe must have full control of their own aircraft, but the matters of supply and administration must be put under one Minister and one department."

Lord Montagu, after stating that he was putting before the Cabinet a draft scheme for a Board of Aviation, concluded, "I am taking up this campaign on behalf of aviation because I think that aviation is going to be one of the deciding factors in the war. It may seem a small thing now, but if the war goes on, as it may, for another eighteen months or two years, and any one of the great nations involved starts out now with a really big scheme of building planes and airships, it may prove to be the deciding factor in the closing months. As far as I can gather Germany will have by May 1st something like fifty Zeppelins, out of which something like thirty will be available for attacks on this country. They are increasing the number of their planes and the power of their engines. We are doing a good deal too, but I am not satisfied that we are doing anything like enough. It is because I believe we are not doing enough, and because we shall not be able to do enough without some unified control and concentration of effort, that I am trying to make the Government and the people of this country see how important this question is."

On the motion of Colonel Cornwallis-West, a resolution was adopted expressing the view that the establishment of a Board of Aviation, with full executive powers, under the direction of a Minister with a seat in the Cabinet had become a national necessity for the defence of helpless non-combatants, and for the successful prosecution of the war.

MR. PEMBERTON-BILLING'S AIR SERVICE SCHEME.

ON Wednesday last week Mr. Billing, in a memorandum to the Prime Minister, put forward his draft scheme for the development and re-organisation of the Air Service. By way of preface, Mr. Billing states that

"Since the Government have not found it convenient to keep their promise made in February, 1916, that the question of the re-organisation of the Air Service shall be discussed at an early date, and this in spite of the fact that the period of year suitable for sustained operations in the air is now at hand, presenting opportunities that will be lost for another year if no steps are taken to seize them, I think it is desirable to lay before you for the consideration of the Government a scheme of organisation that will, in my opinion, put an end to the colossal waste of energy and material entailed by the present chaotic methods of administration."

Mr. Billing then gives the outline of the general principles of his scheme, with the proviso that he is prepared to produce more detailed proposals when asked to do so. His plan is as follows:—

"The operations of aircraft have three purposes—(1) Naval reconnaissance; (2) military reconnaissance; (3) aerial warfare. Of these only the second has as yet attained even a moderate development, and even this has been severely handicapped by inefficient material. The first and third, owing to lack of an intelligent, far-sighted, and consistent policy, have never advanced beyond an embryo state."

"To be consistent, a policy must be directed from one centre, at which must be collected the best brains available, and these brains must have a competent knowledge of all the problems involved. Such a centre can only be created by the formation of an Air Board at which all aerial interests are represented. It is suggested that this Board should be constituted as follows:—

"Air Minister, with seat in the Cabinet; Director of Operations; Director of Air Defences; Director of Construction; Director of Personnel; Director of Equipment."

"These members should be appointed by Letters Patent under the Great Seal. To them should be added two associated members, one representing the Navy and the other the Army. These two members would be nominated by the Admiralty and the Army Council respectively, and would have the right to take part and vote in all discussions. The Air Board would appoint a Parliamentary and Financial Secretary and a Permanent Secretary."

"This Board should have control of the construction of all types of aircraft, and should control all operations not purely naval or military (as hereafter defined). It will require as heads of department, working under it, eight superintendents to deal with—(1) Aeroplane and seaplane construction; (2) airship and balloon construction; (3) engine construction; (4) armament construction; (5) laboratory; (6) aircraft factory; (7) stores and transport; and (8) works and buildings; a chief accountant; and an assistant secretary (in charge of clerical staff). The first four of these heads of department will not only be responsible for construction to meet present needs, but will be required to initiate experiment and research within their respective spheres."

"The duties of the members of the Board will be allocated as follows:—

"Air Minister.—(1) General policy and supervision; (2) appointments of all officers of higher rank; (3) promotions and removal of all officers; (4) civil appointments and promotions; (5) honours and rewards."

"Director of Operations.—(1) To advise the Board as to the operations fit to be undertaken and to supervise the carrying out of these operations decided upon by the Board; (2) control of the operations, Intelligence and Meteorological Departments; (3) subject to the general policy as laid down by the Board, to direct the distribution and movements of all aircraft not allocated to the Navy or Army."

"Director of Air Defences.—(1) Control of anti-aircraft defences of Great Britain; (2) control of defence flights of aircraft located at stations within Great Britain to intercept raiders from over-sea."

"Director of Material (Construction).—(1) To advise the Board as to types of aircraft to be constructed, and to superintend construction of the types decided upon; (2) control of aeroplane, seaplane, airship, and engine departments; (3) the administration of air dockyards, factories, and experimental establishments; (4) control of technical, constructive, and inspectional staff; (5) armament questions affecting construction of aircraft; proposals for new types of guns or bombs; (6) purchase of aircraft and disposal of aircraft deleted from service; (7) invention affecting construction."

"Director of Personnel.—(1) Entry of officers and men and record of services; (2) training and education; (3) pay, allowances and

pensions; (4) discipline; (5) uniform; (6) reserves; (7) control of personnel and training departments."

"Director of Equipment.—(1) Manufacture, purchase and supply of all stores, including ordnance, victualling, and clothing stores; (2) transport of all kinds; (3) wireless telegraphy and electrical questions; (4) works, buildings, and land."

"Parliamentary and Financial Secretary.—(1) Finance, estimates, and expenditure generally; (2) contracts; (3) accounts."

"Permanent Secretary.—(1) Recommendations to Air Minister for appointments and promotion of civil staff; (2) discipline of civil staff; (3) correspondence."

"Associated Members.—To keep the Board in touch with the special requirements of the Naval and Military Services as regards construction, and to see that those requirements are met with due regard to their relative urgency."

"It is not proposed that the Air Board should interfere with aerial operations that are auxiliary to the Naval and Military Forces. The e would be controlled by the Admiralty and the Army Council respectively. They include:—

"Naval.—(1) Scouting and driving off enemy scouts; (2) spotting the fall of shot; (3) defending fleets from aerial attack."

"Military.—(1) Reconnaissance and prevention of reconnaissance by the enemy; (2) offensive over the enemy's lines and attacks on bases of the hostile army."

"The object of air operations should be a vigorous and sustained offensive against enemy air bases, munition and poison-gas factories, dockyard and storehouses. This is the only really satisfactory method of defending the lives and property of the British people against hostile air attack, but since we have allowed the enemy to obtain command of the air in certain directions, offensive operations must be supplemented by air defences."

"Until a suitable night flying aeroplane, capable of seeing, reaching and attacking a Zeppelin, has been produced in sufficient quantities, the defence of this country against aircraft flying at night must rest upon the gun and the searchlight. Against daylight raiders the aeroplane, if properly armed and of sufficient speed, will be the more effective. The co-ordination of these two methods of defence should be in one man's hands, and that man must know sufficiently about the possibilities and limitations of night flying, with the material available, to enable him to avoid the useless sacrifice of valuable lives and machines on impossible tasks."

"The machines and personnel necessary for such night or day defence flights should be provided and maintained by the Imperial Air Service. The manning of the guns and searchlights should be confined during the war to officers and men not suitable for active service in the field, but otherwise competent. The strain on the physique in this service is not great. The present system of warning by telephone has not been efficient. A more efficient system of telegraphic light signals and luminous maps should be substituted."

"The Air Board should control all aircraft construction for three reasons:—

"1. It would soon become the greatest user of aircraft material."

"2. The present competition between two constructive services, though it has had some advantages in the early stages of evolution, is not economical, and there will be sufficient criticism from the older services to ensure that the board does not neglect to keep in touch with, if it does not outstrip, the advances of the science of construction among Allies and enemies."

"3. For the economical production of fighting machines types must be standardised and the machines produced rapidly before the type becomes obsolete. Many machines produced to-day are simply waste material when ready, because they have been so long under construction."

"If the Naval Air Service is confined to its legitimate functions, there will be a sufficient surplus of experienced airmen to form the nucleus of a new corps. The training of the additional numbers required will not be a long business if it proceed on intensive lines; much of the time at present devoted to so-called training in the training establishments is really wasted on idle loafing. The authorities' refusal to transfer the pilot training establishment, subject to the French Government's sanction, to the south of France (where the climate gives more hours per day suitable for training) is entirely responsible for the short supply of pilots to-day."

"The Imperial Air Service should have a distinctive uniform, and qualified pilots should wear an eagle badge, of three classes (bronze, silver, and gold), according to proficiency."

"The arguments for a single constructive service apply with equal force as regards the supply of stores for the equipment of the aviator and his machine. Questions relating to buildings and land must be left to the proper departments of the respective services. There should be a separate Air Service Vote, and separate Air Service estimates and accounts should be submitted to Parliament."

THE SOCIETY OF BRITISH AIRCRAFT CONSTRUCTORS.

A FORTNIGHT ago we published in "FLIGHT," under "New Companies Registered," the formal particulars of the Society which the leading firms have brought into being under the above heading in connection with the very rapidly expanding aircraft industry. The mere perusal of the names which appeared in that list is sufficient to show the widely-spread interests which are now involved in the making of aircraft and their component parts. Even more this can be realised from the more extended list of firms with their representatives given below, who have already decided to support this new Society, which has as its main purpose but one object, the furtherance of the interests of the British air industry as a whole. It includes not only the constructors of aircraft, but most of those firms who have already laid themselves out for the construction of the special engines most suitable for air work, whilst everybody associated with the supplying of accessories and parts, however small, can be identified with this very up-to-date body of traders by becoming Associates of the Society. There is no question of the Society being one for combining to control the regulation of prices or any object of that character. Neither is there any intention on the part of the body to criticise or to interfere with service matters. The one sole idea is to foster the combined interests of the firms which are now so deeply involved in the future of the industry, and of those who are almost week by week joining up in some form for the furtherance of the development of air requirements.

One feature, we understand, of the Society will be to make arrangements so that members may exchange views upon technical and other matters concerning the industry, and we have no doubt that in good time a number of informative "papers" will form a feature of meetings of the members.

It will be noted that Mr. H. White Smith, of the British and Colonial Aeroplane Co., Ltd., has been unanimously elected Chairman of the Council of the Society, and the names on the list of the Committee of Management, which we give below, to whom the general conduct of the business has been delegated, should carry with them the confidence of every man in the trade.

There are a multiplicity of directions in which the Society can be of almost incalculable value to the industry as a whole, and the fees which it has been deemed wise to attach to membership should supply a sufficient sum to ensure the carrying out of the objects which the founders have in mind. The entrance fee for Ordinary Members is £30, and the annual subscription £20. For Associate Members the entrance fee is £15 and the subscription £10. We welcome the formation of this body as giving promise of dealing with many very vital matters which already have cropped up in connection with the aircraft industry, and as years go on will probably become more and more important to the men who have had the courage to back their faith in this new industry, by a substantial stake.

We would repeat that the temporary office of the Society is St. Stephen's House, Victoria Embankment, Westminster, and the Secretary *pro tem.* is Mr. Charles V. Allen.

List of Committee of Management.

Mr. H. White Smith (*Chairman of the Council*), British and Colonial Aeroplane Co., Ltd.
Major H. F. Wood, Vickers Limited.
Mr. R. O. Cary, Sopwith Aviation Co., Ltd.
Mr. G. Holt Thomas, Aircraft Manufacturing Co., Ltd.

Mr. Pemberton-Billing's Campaign.

CONTINUING his campaign for a better air service, Mr. Pemberton-Billing on Sunday lectured at His Majesty's Theatre, London. Referring to his scheme for the creation of an Air Board, Mr. Billing explained that he had already laid it before the Prime Minister. After talking to Mr. Asquith for about half-an-hour, explaining how to appoint an Air Board, the Prime Minister said to him, "God bless my soul! Nine more jobs! Nine more salaries!" "I replied," said Mr. Billing, "No, by providing nine men who are at present drawing salaries and doing nothing." The remedy for Zeppelin raids was an organised offensive which could operate wherever Zeppelins were built or housed. We could reach by our machines the present Zeppelin sheds, and if, for safety, the enemy moved them to the eastern front, then we could rely on Russia to take a hand in the game.

Mr. Pemberton-Billing is holding a meeting at the Albert Hall, London, on Saturday, April 29th, at 3 p.m.

Workers at the R.A.F.

A PROBLEM was offered to the local tribunal for solution by a deputation of workers recently discharged from the Royal Aircraft Factory, Farnborough, who asked that their position might be defined.

The Chairman was informed that when in November last a

Mr. Howard T. Wright, J. Samuel White and Co., Ltd.
Mr. H. V. Roe, A. V. Roe and Co., Ltd.
Mr. E. B. Parker, Short Bros.
Mr. L. Coatalen, Sunbeam Motor Car Co., Ltd.
Mr. E. W. Petter, Westland Aircraft Works.

List of Companies and Firms who have formally notified their intention of joining the Society.

Name of Company or Firm.	Representative on First Council.
Aircraft Manufacturing Co., Ltd. ...	Mr. G. Holt Thomas.
Airships, Ltd. ...	Mr. G. Holt Thomas.
The Austin Motor Co. (1914) Ltd. ...	Mr. Herbert Austin.
William Beardmore and Co., Ltd. ...	Mr. C. G. Gourlay.
The Blackburn Aeroplane and Motor Co., Ltd. ...	Mr. Robert Blackburn.
Boulton and Paul, Ltd. ...	Mr. G. E. Fiske.
The Brush Electrical Engineering Co., Ltd. ...	Mr. B. Broadhurst.
The British and Colonial Aeroplane Co., Ltd. ...	Mr. H. White Smith.
The Coventry Ordnance Works, Ltd. ...	Lieut.-Col. Mansell.
The Daimler Co., Ltd. ...	Mr. E. M. C. Instone.
Darracq Motor Engineering Co., Ltd. ...	Mr. Robert Crossley.
William Denny and Brothers ...	Sir Archibald Denny, Bart.
The Dudbridge Iron Works, Ltd. ...	Mr. Francis J. Platt.
The Grahame-White Aviation Co., Ltd. ...	Mr. F. H. Payne.
Hewlett and Blondeau, Ltd. ...	Mr. G. Blondeau.
Jouques Aviation Works ...	Mr. L. A. Jouques.
Mann and Grimmer ...	Mr. Grimmer.
Martinsyde, Ltd. ...	Mr. Hamilton Fulton.
Mann, Egerton and Co., Ltd. ...	Mr. G. N. C. Mann.
D. Napier and Son, Ltd. ...	Mr. H. T. Vane.
Handley-Page, Ltd. ...	Mr. F. Handley-Page.
Phoenix Dynamo Manufacturing Co., Ltd. ...	Mr. P. J. Pybus.
Parnall and Sons ...	Mr. George G. Parnall.
A. V. Roe and Co., Ltd. ...	Mr. H. V. Roe.
Robey and Co., Ltd. ...	Mr. Ashley P. Pope.
Ruston, Proctor and Co., Ltd. ...	Mr. F. H. Livens.
The Standard Motor Co., Ltd. ...	Mr. R. W. Maudslay.
S. E. Saunders, Ltd. ...	Mr. S. E. Saunders.
Short Bros. ...	Mr. E. B. Parker.
The Sopwith Aviation Co., Ltd. ...	Mr. R. O. Cary.
The Sunbeam Motor Car Co., Ltd. ...	Mr. L. Coatalen.
The Siddeley-Deasy Motor Car Co., Ltd. ...	Mr. J. D. Siddeley.
Fredk. Sage and Co., Ltd. ...	Mr. E. C. Gordon England.
The Norman Thompson Flight Co., Ltd. ...	Mr. Norman A. Thompson.
Vickers Ltd. ...	Major H. F. Wood.
Westland Aircraft Works ...	Mr. E. W. Petter.
J. Samuel White and Co., Ltd. ...	Mr. Howard T. Wright.
G. and J. Weir, Ltd. ...	Major J. G. Weir, R.F.C.
Wells Aviation Co., Ltd. ...	Mr. R. F. Wells.
Whitehead Aircraft Co., Ltd. ...	Mr. J. A. Whitehead.
Wolseley Motors Ltd. ...	Mr. B. Caillard.

Territorial unit was formed, all the employees at the factory joined; they were medically examined and attested, signed on for four years, and were given uniforms. Recently a number had been discharged from the factory, and this brought about automatically their discharge from the unit which they had joined. No steps had been taken to transfer them to any other unit, although a certificate to the following effect had been given to some of them: "This man is enlisted in the Hampshire Aircraft Parks of the Royal Flying Corps (Territorial Force) by reason of his being an employee of the Royal Aircraft Factory. He is leaving the factory, and will therefore be discharged or transferred from this corps, and if you accept him I will on notification arrange accordingly." These certificates were in some cases presented to the Royal Flying Corps and the Royal Engineers, but the applicants for enrolment were told in each instance that these particular corps were full.

The men wished to know whether they were to be considered as discharged soldiers, or treated as conscripts. Some had already received notice under the Military Service Act.

The Chairman said it was an extraordinary position, and the members of the tribunal fully sympathised with the men, especially as several of them had joined up of their own accord early in the war, and had been brought back by the factory authorities. The question was adjourned in order to secure a ruling from a higher authority.

AIRCRAFT WORK AT THE FRONT.

OFFICIAL INFORMATION.

British.

General Headquarters, April 11th.

"In the course of eight fights in the air yesterday our machines drove down one of the enemy's without sustaining any loss. During the day, however, one of our aeroplanes was brought down by gunfire."

"Admiralty, April 16th.

"On the evening of April 14th a raid on Constantinople was carried out by three naval aeroplanes. Bombs were dropped on the Zaitunlik powder factory and the aerodrome hangars.

"Another naval aeroplane visited Adrianople and dropped bombs on the railway station.

"The following were the officers who took part in the operations: Squadron-Commander J. R. W. Smyth Piggott, Flight Lieutenant K. S. Savory, Flight Sub-Lieutenant R. S. W. Dickinson, and Flight Sub-Lieutenant I. H. W. Barnato. All have returned safely.

"The flight to Constantinople and back measured over 300 miles, and, though fine weather prevailed at the start, adverse conditions supervened, with wind, rain, and thunderstorms."

French.

Paris, April 11th. Afternoon.

"This morning one of our pilots brought down a German aeroplane, which fell in our line near Badonvillers. The two enemy airmen were killed in their fall."

Paris, April 11th. Evening.

"During the night of April 10th-11th, one of our bombardment squadrons on two different occasions dropped 27 and 21 shells on the stations of Nantillons and Briuelles. The same squadron rained projectiles on the emplacement of a long range 380 mm. (15 in.) gun."

Russian.

Petrograd, April 14th.

"Near the station of Seslavino one of our batteries brought down an enemy aeroplane, which came to earth near the township of Gloubokoie,

"An enemy aeroplane succeeded in reaching Ivantz, on the Dniester, opposite Khotin, and in dropping five bombs, wounding a sentry. On hearing of this the Emperor, who at the time was reviewing troops six versts north of Ivantz, gave orders that the wounded man should be decorated with the Fourth Class of the Order of St. George."

Petrograd, April 15th.

"Yesterday our aeroplanes dropped fifty bombs on the stations at Zucka and northern Czernowitz. All the machines returned undamaged."

Italian.

Rome, April 11th.

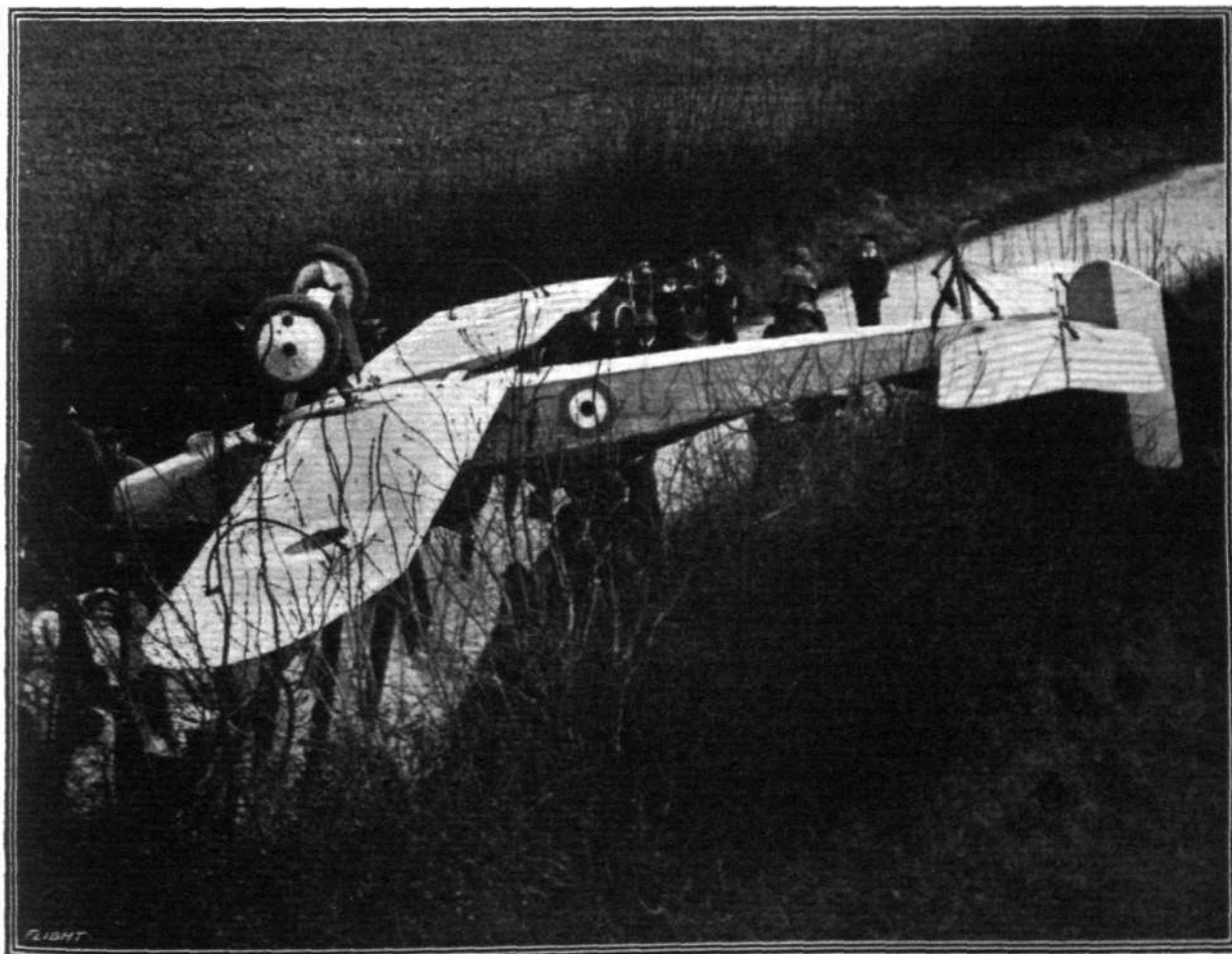
"On the night of April 10th enemy seaplanes dropped 11 bombs on Grado. There were no casualties and only unimportant material damage was caused."

Rome, April 12th.

"In addition to the part played by the Italian Navy on the occasion of the Austrian air raid on Ancona on April 4th, during which the Italian naval guns brought down three Austrian hydroplanes, Italian naval machines have participated in other operations. In the Lower Adriatic two Italian hydroplanes, having bombed a point on the enemy coast, and having put to flight the men who were guarding it, alighted on the sea and reached the coast.

"The four officers of the hydroplanes landed and set fire to a house, which was being used as a signal station, and two huts; they also destroyed a number of telegraph poles. They then blew up a small munition depot, ignited several coal-stacks and destroyed the landing stage. Finally they returned to their machines and flew back to their base.

"In the Upper Adriatic, one of our dirigibles dropped 500 kilogrammes (half a ton) of explosives on the railway station at Nabresina. All the bombs exploded, and the airship returned unharmed, in spite of the lively fire of the enemy's artillery.



A CLEAN SOMERSAULT.—An aeroplane mishap near Basingstoke. The machine landed upside down, as will be seen, right across the road. The pilot had a remarkable escape, but being strapped in was absolutely unhurt.

"Also in the Upper Adriatic, naval anti-aircraft batteries brought down an enemy hydroplane. Two naval officers, who were in the machine, were made prisoners."

German.

Berlin, April 11th.

"Two enemy aeroplanes were brought down south-east of Ypres by means of our anti-aircraft guns."

Berlin, April 12th.

"In aerial engagements a French 'chaser' aeroplane was shot down near Ornes (in the Woëvre). The pilot is dead."

Austrian.

Vienna, April 15th.

"Yesterday morning, soon after 5 o'clock, seven hostile aeroplanes, four of them battle-planes, appeared above Czernowitz and the railway establishments north of the town. Some of our aero-

planes ascended in pursuit, and succeeded, after a two hours' fight in the air above Czernowitz, in bringing down a battle-plane. The hostile squadron fled. An aeroplane which had been hit fell headlong near Bojan, between the Russian line and ours, where it was destroyed by our gunfire. The observer was killed. Our aeroplanes returned undamaged."

Turkish.

Constantinople, April 16th.

"On the night of April 14th-15th two hostile aeroplanes ascended from the Dardanelles and flew over Constantinople at a considerable height, dropping several incendiary bombs on two villages, near the town, without causing any damage. Owing to our anti-aircraft fire the hostile airmen lost sight of their object, and returned in the direction whence they came."

From Other Sources.

The *Times* correspondent at Paris, writing on April 11th regarding the fighting round Verdun, says, attention may be drawn to the steady destruction of Fokkers and other enemy aircraft by French machines and guns.

Writing from the British headquarters in France on Sunday, Reuter's correspondent says:—

"A good specimen of a Fokker machine is now in British hands, and the attendant incidents are worth telling. A strapping soldier, an ex-Guardsman, now belonging to a signal company of the Royal Engineers, was trundling along on his push-bicycle, when he suddenly came upon the scene of the landing. He beheld an aeroplane which was clearly not of British pattern and a well-swathed figure standing by it.

"The idea that it was likely to prove an enemy machine never entered the soldier's head. He went up to the embarrassed Boche with his hand extended and a genial smile. The German shook silently and sadly. The well-meaning Tommy then began to flounder into pidgin-French. The Boche plaintively murmured and slowly wagged his head.

"The soldier then moved towards the machine with the idea of investigating what had brought it to earth. At this juncture a party of Fusiliers came round the bend of the road, and in a breath took in the situation—an Iron Cross aeroplane on the ground and its occupant trying to get the engine to work. The Fusiliers doubled, unslinging their rifles as they came.

"The Engineer's presence of mind seems to have gone by the board; he suspected some trick and took to his heels. This was nearly his undoing. The Fusiliers, concluding that he was a Boche trying to make away with papers or photographs, paused and let fly. Happily the aim was too hurried to be good. The soldier took a flying leap into the roadside ditch and there awaited capture. When he learnt that he had missed the chance of making this fine capture himself single-handed, I am told his language was unprintable. The last straw was the guttural chortling of the German."

The *Morning Post* correspondent at Salonica writing on March 31st says:—

"A dainty, picturesque, romantic place Salonica seems as you pass over it in an aeroplane. The experienced traveller who wanted to carry away a pure impression of the beauty of the Levant would never set foot ashore. All these Eastern Mediterranean towns look lovely from the sea, but once you land the smells and the rough-paved, dirty streets soon produce disillusionment and break the spell which Venetian towers and battlements and the cluster of picturesque craft lying along the white stone water-front had worked upon you as you looked first from the sea.

"You would not think that it was possible for a large force like ours to be encamped in this bare land and yet show so little sign of its presence to the sky. You know that thousands of tents are scattered all round for miles over rolling upland and plain, but to the inexperienced eye at least they are comparatively invisible. Smeared with brown mud, they merge imperceptibly into their varied background of sunbaked clay and fresh spring grass. Even the gleaming white line of the traffic-thronged roads is partly veiled by the film of floating dust that hangs permanently over them on a dry day. The raiding Hun airman must often be puzzled where to drop his bombs. Even when he gets a clear view how is he to know which of those countless groups of identical marquees and bell-tents is the most worthy mark?"

"So far as air-war in the Balkans has gone, the honours are easily with the French. Their raids on enemy encampments have

become so frequent that one only records those of exceptional vigour. Their bombing expeditions against Monastir, and especially against Petritch, were of extraordinary violence and efficiency with which the German efforts against Salonica have never been able to compare."

Mr. G. J. Stevens, writing to the *Daily Telegraph* from Salonica on April 13th, says:—

"A squadron of twenty French aeroplanes this morning bombed the enemy's encampments in the neighbourhood of the village of Bogoritsa, on the Serbian frontier. All the airmen returned safely.

The following further details of the raid on the German airship sheds in Schleswig-Holstein appeared in the *Daily Sketch* of the 13th inst.:—

"The five airmen who were officially reported missing a day or two after the raid, and concerning whose fate no news has so far been published, are alive. They are, however, prisoners, and are at present located in Osnabrück internment camp, where, we understand, they are closely confined.

"Their names are:—Flight Lieut. George H. Reid, R.N.; Flight Sub-Lieut. John F. Hay, R.N.; Flight Sub-Lieut. Cyril G. Knight, R.N.; Midshipman Stanley E. Hoblyn, R.N.R.; Richard Mullins, C.P.O. Mechanic 3rd Class.

"With the capture of these airmen three machines were taken. Sub-Lieut. Hay had single-handed charge of a small machine, while the other two seaplanes each had a pilot and observer.

"The news of the personal safety of the airmen has just come to London through several postcards which one of those prisoners has been allowed to send to his wife. Although lacking in detail, these messages give the outline of a story which reveals a self-sacrificing effort on the part of Lieut. Reid to rescue Sub-Lieut. Hay after the latter's machine had been brought down. The seaplanes had completed their work over the German airsheds, and were making for home in a heavy snowstorm. Lieut. Reid's machine was sufficiently near the coast to be under the enemy's fire, when he saw Sub-Lieut. Hay's machine in the water, and that officer struggling beside it. Still under a heavy fire, he planed down to the partly submerged machine, and, although a heavy sea was running, and both he and his observer (Chief Petty Officer Mullins) were drenched to the skin, they managed after a struggle to get Sub-Lieut. Hay aboard.

"Their work of rescue was difficult and hazardous. Almost numbed by the icy water and buffeted by the waves, they were, during the whole of this time, subjected to the fire of the enemy, but as far as can be gathered by the messages which have just arrived no one was hit. Sub-Lieut. Hay was found to be suffering intensely from cold and exposure, but eventually the pilot and his observer made him secure aboard their seaplane.

"But the brave lieutenant who had led the raid upon the airship sheds, and who had thus risked his life to save a comrade, found himself at the mercy of the enemy. He made valiant efforts to get his machine away, but it refused to leave the rough waters. While an enemy water-craft slowly ploughed its way towards the stricken waterplane the pilot exerted his utmost skill in an attempt to get away, but found himself beaten by the weather and the water, and eventually he had to submit to capture.

"The latest message to hand states that Sub-Lieut. Hay has almost recovered from the effect of his exposure, and that all the other prisoners are doing well. Lieut. Reid, who is twenty-seven years of age, was before the war resident engineer at Callender's Cable Co., Victoria Embankment. He received his 'ticket' on March 15th, 1915, at the Central Flying School, Uphavon."

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Boillot Joins French Air Service.

It may be recalled that Boillot, the famous driver of Peugeot racing cars, who has recently been transferred to the French Air Service and brought down his first Aviatik, learnt to fly on an Hanriot in February, 1911.

French Pilot's Escape From Germany.

THE *Matin* announces that Captain Menard, one of the first pilots in the French Air Service, who was on a sick bed at Lille at the moment of the invasion and was taken prisoner, has, together with Lieutenant Pincard, escaped from Ingoldstadt to Switzerland.

AERIAL PHOTOGRAPHY AND THE FOKKER PILOT.

THE following article by Mr. W. Beach Thomas, which appeared in the *Daily Mail* of April 8th, gives an interesting comparison of the methods of British and German pilots:—

"In her campaign for the encouragement of hero-worship as an agent in maintaining popular zeal for the war, Germany has taken every opportunity of bruising the name of Lieutenant Immelmann. He is regarded by his people as the super-hawk who goes daily a-hawking for his master and has not yet been hurt by a single heron, in spite of his many adventures. Let us give Immelmann his due. He is a doughty enemy; but his methods are less heroic than scientific. He does not seek adventure as such or run risks that may be avoided, but hunts deliberately with the single design of destroying any enemy who is so presumptuous as to enter his particular domain, his part of the enchanted forest of the air. His methods and aims illustrate many of the differences between the German conception of war and our own. His plan is simple and effective. He mounts to a great height, even as much as 13,000 ft., working on the principle of the soaring bird in Wither's poem, 'The more he makes wing, he gets power.' At this height, which, of course, can only be climbed in certain weathers, when clouds are high or absent, he has speed in hand, a reserve of striking power, and he can observe with impunity. Even were he over our lines, a realm of air he seldom enters, he would be moderately safe from 'Archies,' and could secure a long lead in case of pursuit.

"When the desired moment arrives and he observes below him an invading plane, he stoops in one long, straight, even dive. His plan is to pass in a rapid diagonal just behind the enemy, at whom he fires continuously as soon as the interval becomes small enough. It is hit or miss with him. Just as some of the hawk family strike once, and once only, and if they fail fail altogether, making no effort to retrieve the issue, so with Immelmann. Whatever degree of success or ill-success he has had while emptying his drum of bullets, he does not alter his tactics, makes no effort to pursue, but continues his dive till it brings him home to his own ground, to his master's wrist.

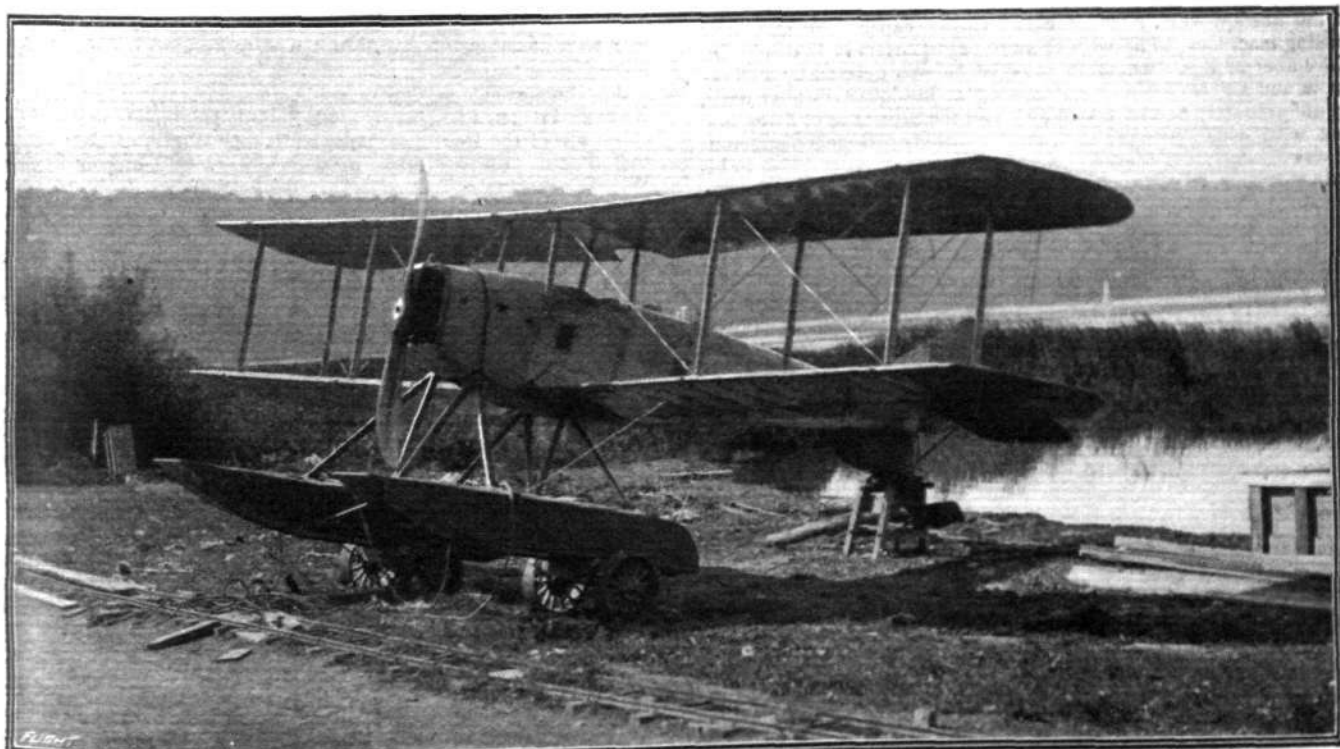
"Such a brief description gives, of course, no idea of the art required to carry out these tactics, nor of the quality of aeroplane contrived for the purpose. You cannot fight in the air without a gift of aircraft and a good machine, even if your plan of campaign is essentially defensive. Immelmann doubtless deserves his worship. Let us give him his title as 'The Eagle of Lille,' the town over which he has principally hovered. Nevertheless it is not the score

of personal successes in combat which give the measure of heroism in air service in war. Personally, if there were a scale of merit, I should put the aerial photographers first. Consider their task. Very often they are called upon to act at the very crisis of an engagement, when, to their great danger, they will be 'the cynosure of neighbouring eyes.' They have one set little piece of ground over which to work, and they must fly at a moderately low altitude, taking the summit of risk all the time.

"Immelmann and his fellows can dive home if they will with a bundle of fairy tales, with conjectures as to the billet of their bullets and the fate of the enemy. A wobble or a *vol plané* in the opposing machine may go down to their credit, and they may think they saw the enemy's observer 'drop a leg,' as men say of partridges. No vagueness is left to the photographer. He hurries home, his plate is developed, and he knows before the sun is high whether he is going to receive 'a bouquet or a punch.' Generally he gets the bouquet, but it does not come from the members of a large house. His photographs are, of course, private and confidential and his work is in a sense journeyman's work, very sound but not at all spectacular.

"On behalf of our air photographers it should be set down publicly to their credit that they are supreme. Undoubtedly and in the belief of specialists they take the best photographs yet seen. For myself, I cannot speak by comparisons. I do not know the German standard. But if any better photographs have been made than those brought back soon after dawn in the flights at St. Eloi and the Hohenzollern Redoubt they must be very good indeed.

"The mark of the flying of the British airmen as contrasted with the German has been the readiness on due occasion to fly low. One of the most courageous enterprises of late was the patrol, the *chassé* of one of our reconnaissance machines over the German lines at so low an altitude that the enemy's 'Archies' did not cease fire till their ammunition was exhausted. In two of the most heroic deeds of the war our men came down to within 200 ft. of their target and made sure of the bull's-eye. This low flying is more often than may be thought a necessary manoeuvre if any aggressive flying is to be undertaken at all. On many comparatively fine days the clouds will come down to levels considerably below 1,000 ft., and no man can fly for a long space within clouds. Even a bird will lose direction in a mist; and if the airman has the advantage over the bird in his possession of a compass, he has much more trouble than the bird in discovering whether he is flying upwards or downwards. Not long since two airmen, diving down



The Thomas seaplane (type H.S.), as being employed by the U.S. Navy at Pensacola, Florida. During tests the average speed developed, with and against the wind, was 82 m.p.h. over a 5-mile course. The machine was piloted by Mr. Frank Burnside, who had with him as passenger and official timer Lieut. Saufly. With the machine fully loaded, the climb was 450 ft. per min., while the gliding angle is stated to have been 1 in 10.2 , but the direction of the wind is not stated.

through the clouds which had developed into a mist, found themselves within twenty yards of the sea at Boulogne, when they expected to find the seashore near Calais.

"Such risks are being taken continually by our men. They are never deliberately taken by the enemy. He is essentially a high flier. Recently I have seen several German planes so high as to be mere specks, and of the many I have seen none has been lower, I should say, than 7,000 ft. The contrast between the two policies or practices—ours and the German—is made without any idea of criticism. For all I know each may be right in relation to the general strategy, or the different aims, or native talent. But this

distinction holds in almost all forms of air service. When the Germans fight they strike. When our men fight they usually chase and pursue. The German photographer, who has become rarer, trusts to the power of the telescopic lens. The German observer and reconnaissance flier has faith in the long view and the lesser risk, and however high his courage he does not stray much beyond the book into the realms of adventure.

"Well, the ways of a man in the air are as wonderful as many of Solomon's four ways; and perhaps, after all, it is the very difference in these ways that most makes enemies respect one another's qualities. You will find no contempt in either air service."

PERSONALS.

UNDER the above heading will be published weekly particulars of a personal character relating to those who have fallen or have been wounded in the country's service, announcements of marriages and other items concerning members of the Flying Services and others well known in the world of aviation. We shall be pleased to receive for publication properly authenticated particulars suitable for this column.

Casualties.

Captain **RAYMOND L. ARMES**, North Staffordshire Regiment, who was reported missing after the fighting at Anzac, and is believed to have been killed, belonged to Sudbury, and was a brother of Lieutenant-Colonel Armès, of the Suffolks. Last year he was invalided home suffering from illness contracted at the front. He was a keen sportsman, and extremely popular with footballers. In February he was appointed a staff officer of the Royal Flying Corps, and had passed the Staff College and the School of Economics.

Second Lieutenant **WILLIAM NORMAN THOMAS**, R.F.C., who was killed on April 8th, aged 28, was a director of Messrs. W. S. Thomas Sons (Ltd.), contractors, of Oswestry. He joined the Montgomeryshire Yeomanry as a trooper in September, 1914, being promoted sergeant despatch rider in December of the same year. He received his commission in the Shropshire Light Infantry in June last, and took his flying certificate at Hendon in the following month. He was educated at Wellingborough, and was a good cricketer and hockey player, frequently representing Shropshire.

Lieutenant **DOUGLAS TWEEDY-SMITH**, second son of Mr. Tweedy-Smith, Normanhurst, Westcliff-on-Sea, is announced to have died on the 10th inst. at the Red Cross Hospital, Netley. Before the outbreak of war he was a member of the London University O.T.C., and had done four years' service in the Public School Cadet Corps. When hostilities broke out he immediately received a commission in the 15th Middlesex, and last year transferred to the Royal Flying Corps, in which he speedily obtained a pilot's certificate and his "wings," being promoted last October to be inspector of aeroplanes at the headquarters, Farnborough. In this capacity he had, after passing machines, to fly with them to headquarters in France. On November 27th last whilst so engaged he was delayed by a snow-storm and a gale of wind, and arriving at headquarters after dark, he unfortunately had to descend without the assistance of flares, and met with a serious accident, only recovering from a dangerous illness at the end of March of the present year. On returning to his duties he was ordered to take a draft of men to France, and owing to submarine menace had to return under exciting conditions. On arrival at Southampton he was taken seriously ill and conveyed to Netley Hospital, where he died on the evening of the 10th inst. He was a keen motorist and aviator, a good all-round sportsman, and greatly beloved by his brother-officers and a large circle of friends. He was educated at Palmer's College, Grays. Lieutenant Douglas Tweedy-Smith was born on September 24th, 1896.

Another Damaged Zeppelin Story.

DAMAGED Zeppelins appear to have a partiality for the Namur district, if all the rumours which come from the Dutch frontier are to be credited. A report received in Amsterdam states that a Zeppelin, which was probably returning from England, has descended in a very badly damaged condition at Marchovelette, in the province of Namur, and the German authorities have taken all precautions to prevent anybody approaching the scene of the disaster. No indication is, however, given as to when the incident occurred.

Another German Wireless Story.

IN the "news" sent out by wireless from Berlin on the 14th, there were the following statements which, we are officially informed, are so grossly exaggerated that it is only just possible to recognise the incident on which they may be founded:—

"Rotterdam reports interesting details supplied by Dutch sailors returned from England about the last Zeppelin raids. Leith, Hull, Sunderland, Newcastle, and Grimsby suffered terribly. In Leith harbour a British four-masted ship was completely destroyed. At the railway station a train was hit. A big spirit factory was also hit by an incendiary bomb and burnt down. The Tyne bridge, near Newcastle, was almost entirely destroyed. At Grimsby, barracks

Lieutenant **JOHN NICHOL**, of the Royal Scots Fusiliers and R.F.C., who was killed on April 5th, was the second son of Dr. and Mrs. Nichol, of Margate. He was educated at Mr. Hawtrey's, Westgate, at Charterhouse School, and the R.M.C., Sandhurst. He received his commission in 1912, and joined the 1st Battalion of his regiment in Pretoria, returning shortly before the war. He was prevented from going to the front with his regiment by an accidental injury, and after a few months with the 6th Battalion was attached to the R.F.C. as an observer. In this capacity he served at the front from February to October, 1915, and was then sent home to be trained as a pilot. He took his "wings" in January, 1916, and met with his fatal accident on April 5th.

Married and to be Married.

Flight-Lieutenant **THEODORE MARBURG**, was married at Netley on the 10th inst. to the Baroness GISELE DE VIVARIO, of Liège. The bridegroom is the son of Mr. T. Marburg, formerly American Minister at Brussels, and was an undergraduate of Pembroke College, Oxford, until last summer, when he became a pilot in the Royal Flying Corps. Early in October he went to France, and on December 7th he met with an accident. He and his observer were starting from an aerodrome on a "spotting" flight in a high wind, and had reached a height of about 200 ft. when the engine failed and the machine nose-dived to the earth. The observer escaped with nothing more serious than a nervous shock, but Lieutenant Marburg's left knee was pierced by a piece of woodwork, and, in spite of every effort of the medical services, it was found necessary five weeks after the accident to amputate the leg above the knee. The bride is a refugee from Liège. The bride and bridegroom sailed for America on Saturday. Lieutenant Marburg hopes to be provided with an artificial leg on his return and to resume his duties as a pilot.

An engagement is announced between **ALISTER FREDERICK KEBLE WHITE**, Lieutenant, 1/6th Suffolk Regiment, and R.F.C., eldest son of the Rev. and Mrs. A. Keble White, of Chevington, Suffolk, and **DORIS FREDA**, only daughter of Lieutenant-Colonel W. T. PRETTY, T.D., D.L., 1/6th Suffolk Regiment, and Mrs. PRETTY, of Greylands, Melton, Suffolk.

Items.

Flight Sub-Lieutenant **REGINALD ALEXANDER JOHN WARNEFORD**, of Satley, Oxhey Avenue, Watford, who was killed on June 7th, while flying at the Buc Aerodrome, Paris, left £39 14s. 11d. Letters of administration are granted to his mother, Mrs. Alexandra Corkery, of Morton Road, Exmouth, Devon.

were devastated, and several hundreds of soldiers were buried under the ruins. A large number of French anti-aircraft guns, together with French officers and soldiers, have recently been brought to England, and are employed at several places."

Moving Zeppelins Back.

WRITING on Saturday, the *Daily Mail's* correspondent at Rotterdam pointed out that, fearing a repetition of the Allied successful air raid on Zeebrugge, the Germans are taking extraordinary precautions and are removing the Zeppelins from the sheds at Eterbeek and Berghem to Germany.

Bill-Posting by Zeppelins.

INFORMATION received in Amsterdam from a frontier correspondent states that two Zeppelins visited a number of small villages in the province of Luxembourg as well as Liège on April 7th, throwing down French papers, which had been specially printed, giving a revised version of Herr Bethmann Hollweg's speech. The Zeppelins also scattered proclamations advising the population, in view of the early end of the war and the inevitable victory of the German arms, to cease their hostility towards the Germans in their own interests.

Models

A Combination Monoplane.

In sending the accompanying photographs, Mr. Geo. H. Barraclough says:—

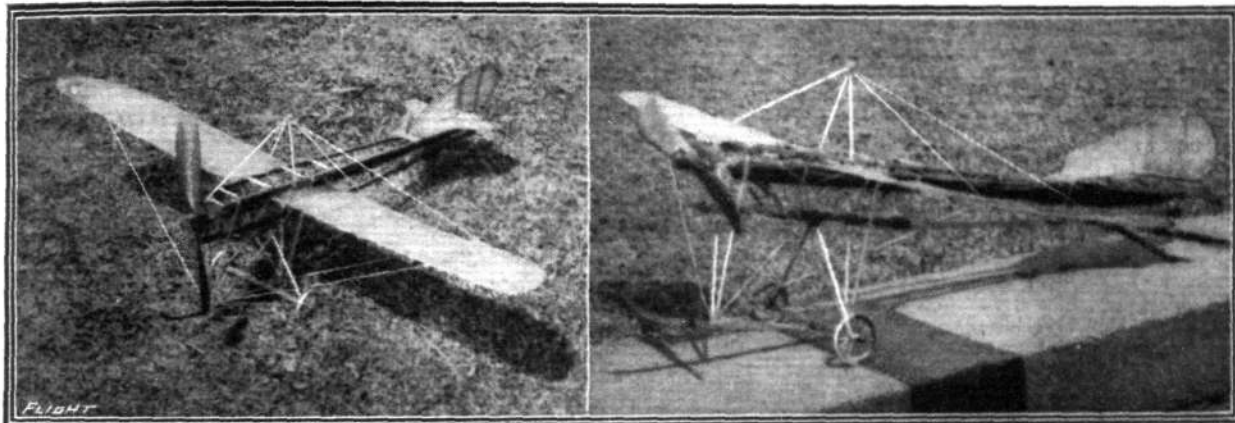
"I am sending you three photographs of my model r.o.g., monoplane, which I built in 1913, which I think might be of interest to your readers. The model is not intended to represent any well-known type completely, but is a combination of what I consider to be the best points incorporated in a few of the most popular types used in this country. The fuselage is of the Black-

"I intend to make a quarter scale model of the 'Popular' when I have finished the present one."

A B.E. Model.

Mr. H. E. Taylor, who is employed at an aeroplane works, is building a model of a B.E. biplane, and sends the following particulars with the photograph of the fuselage:—

"I enclose a photograph which I think will be of interest to your readers. It represents a model of the B.E.2c aeroplane, which I am building, as I have good opportunities for examining the details.



A monoplane built by Mr. Barraclough, which embodies features of well-known types, as outlined in the above notes.

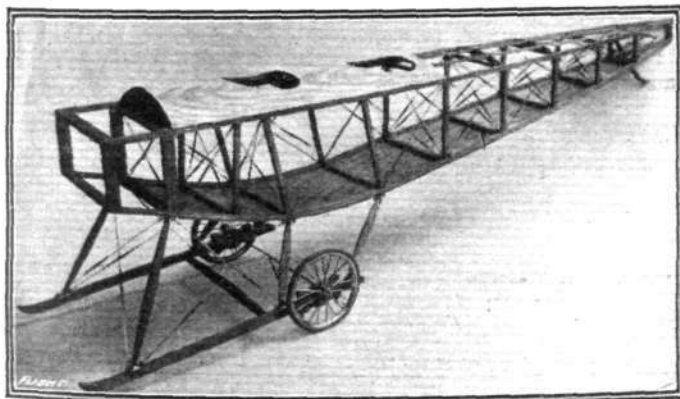
burn type, the chassis is taken from the 'Avro' biplane, and the main planes are from the 'Blériot' monoplane. An 'Integral' propeller is fitted of 10 inches diameter, driven by 20 strands of $\frac{1}{4}$ -in. flat rubber strip. Aluminium tubing is used for the chassis struts, and the *cabane*, the wheels being mounted on a central skid of ash. 'Bragg-Smith' silk and 18 gauge piano wire are used for the planes, the longest flight obtained being about 100 yards."

A Scale Model.

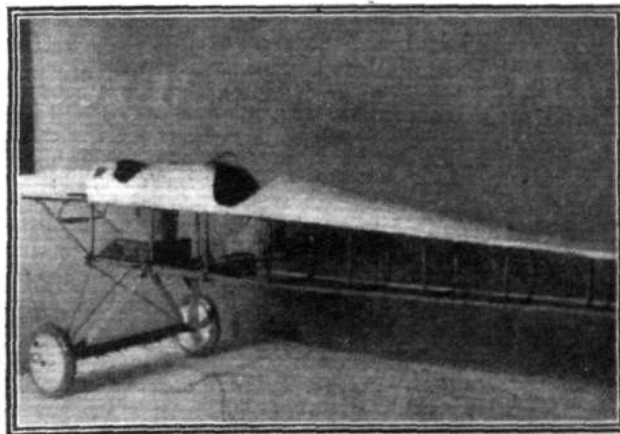
This week we are able to reproduce a photograph of a fuselage made to scale, regarding which Mr. A. H. Ball, of Crayford, writes:—

The scale is $\frac{1}{4}$ full size, the length of the model being 5 ft. 8 ins. The span of the wings when complete will be 6 ft. 6 ins.

"Most of the fittings are reproduced in miniature, and the model is fitted with working controls. The wheels are made from wooden rings covered with stiff paper, which is white enamelled. The chassis vee's are made of metal tubing streamlined with wood and bound with fabric. The cowl, which is covered with fabric, and the seats are of spruce veneer. The main petrol tank is represented in copper foil. The wind shields and panels are of celluloid. I shall be pleased to send more photos. of the model when complete.



Model of the Simplex (Mayo) fuselage built from "FLIGHT" scale drawings by Mr. A. H. Ball.



Scale model of a B.E.2c fuselage by Mr. H. E. Taylor.

"I am sending photo. of a scale model ($1\frac{1}{2}$ in. to 1 ft.) of the 'Simplex' (Mayo) tractor biplane, from scale drawings and views which appeared in 'FLIGHT,' July 15th and August 6th, 1915. I found 'Constructional Details' very helpful, but I got disappointed when they ceased to appear; how helpful construction details of wing ribs, elevator and tail would have been. Some time ago I gave the job up, but when 'Popular' type details appeared I took heart again, and am now busy making the main planes. I consider that page 194 of 'FLIGHT,' March 9th, 1916, is just the kind of thing scale model makers require.

A Change of Name.

ALL model workers will be interested to hear that the name of J. Bonn and Co., Ltd., has been changed to A. E. Jones, Ltd., the registered address being 97, New Oxford Street, London, W.C., Those who have had dealings with the firm will not need to be told that this is but a change of name, as the business has been under the sole control of Mr. A. E. Jones, the managing director for the past two or three years, and the model aeroplane accessory department will be carried on in the future, as in the past, under his direct personal supervision.

LEGAL INTELLIGENCE.

Defence of the Realm Act Charge.

AT Dover Police Court on the 13th instant, before Captain R. B. Cay, R.N., and Alderman J. W. Bussey, Mr. Edgar C. W. Middleton was charged with attempting to elicit information with respect to the movements or dispositions of the Royal Naval Air Service, such as might be of value to the enemy, the proceedings being taken under the Defence of the Realm Act.

Mr. Ernest Chitty, prosecuting on behalf of the Admiralty, said he was instructed by the Admiralty to ask for a remand for a week, the defendant to remain in custody. The facts, he said, were, briefly, as follows:—

Mr. Middleton for a short time was a probationary flight sub-lieutenant in the Royal Naval Air Service, and was quartered at Dover. In that connection he, of course, made the acquaintance of a number of officers in the R.N.A.S. still serving at Dover. At the present time he appears to be an ordinary civilian journalist who writes articles, I think, for the *Daily Mail* under the heading of "An Air Pilot." He came down to Dover and interviewed at least three officers of the R.N.A.S. Two of them he met in the street, and the third he went specially to the seaplane station to enquire for. They are all officers he had met previously while at Dover, and in conversation with them he said he had come down to Dover "to do a bit of spying for Pemberton-Billing."

The Chairman: A bit of spying?

Mr. Ernest Chitty: I do not suggest that he used the word "spying" in a traitorous sense, but that he was endeavouring to obtain information he was not entitled to obtain. He also said to an officer that he was "doing spying for Pemberton-Billing and for the *Daily Mail*, which was running Pemberton-Billing." He invited the officer to lunch. During conversations with these officers he endeavoured to obtain from them information as to where the officers of the R.N.A.S. were stationed at the present time. Such information was clearly directed to the readiness or unreadiness of the R.N.A.S. to meet a sudden aerial attack. That is the gist of the matter. He wished to know where they were quartered and as to their proximity to the coast whence they were to start. He wished to obtain information really as to the preparedness of the air station at Dover to meet attack. Under the Act it is not necessary to prove that the defendant had traitorous intentions. It is quite sufficient if an unauthorised person endeavours to obtain information which might be of some use to the enemy. Obviously it would be of some use to the enemy to know where or to what extent the air forces at Dover were prepared to meet a sudden air raid. There is no doubt that the defendant is an unauthorised person and had no business to attempt to obtain this information. I shall resist any application for bail. As defendant is acquainted with all the officers here at Dover it is not desirable that he should be left at large while the Admiralty are making inquiries.

Detective-Inspector Mole, Scotland Yard, deposed to arresting the accused the previous afternoon on instructions received at the Admiral's office. He found the accused at the Grand Hotel, lunching with Flight-Lieutenant Cannon, R.N.A.S. After defendant had been taken to the Admiral's office instructions were given that he should be taken to the police-station. Accused asked the reason, and witness told him that other officers would be coming down, and perhaps he would be interrogated regarding his visit to Dover. When charged at the police-station accused replied:

"I deny it wholly and entirely. What I have said was only to my friends in the Air Service, whom I know, and it is purely a personal matter."

Mr. Chitty applied for a week's remand, and said the Admiralty opposed bail.

Mr. Foulkes Jones, for the defence, said: Mr. Middleton is a journalist. He was formerly in the Air Service, but was invalided out of the service some months ago. Since then he has been engaged in journalism. He was here for a perfectly innocent reason, engaged in journalistic work, making inquiries into a matter which has been the subject of inquiry in Parliament and in the country for many weeks past. When the time comes I think he will be able to satisfy you that he was perfectly innocent in the matter.

Mr. Middleton was remanded in custody for a week.

CORRESPONDENCE.

[1919]. *Re* Mr. R. P. Hearne's article on airships, April 6th, while quite agreeing about the impracticability of melting snow off a Zeppelin, I must protest against his absolutely wrong idea about going with and against a snowstorm. It implies a total lack of realisation of the whole subject, which is quite unaccountable for a writer of aerial books. Mr. Hearne seems to have the ordinary

nautical view of the subject, where to a seaship, it certainly does make a vital difference, whether direction is to windward or leeward; whereas in the air it is relative movement that matters, and except that one's travel is less or greater relatively to the earth it does not make the slightest difference whether the airship goes 60 miles per hour in the same or contrary direction of the wind. The pedestrian analogy also is not in the least parallel. The Zeppelin is not attached to the land and towed. Further, and here I admit the point is more speculative, I doubt the probability of his conclusion re force of impact and caking snow. As I implied the airship's speed is through the air (nothing to differentiate between opposition and running with the wind except that in the latter case, if it happens to be in the direction you want, you can drift without motive power), and the only object-lesson I am acquainted with is the effect of high wind and snow on buildings, and this is a fairly good analogy to an aircraft in a snowstorm driven at high speed. It seems that snow piles up on the portions at right-angles to wind, is swept off the diagonal surfaces or parallel surfaces and piles up in the sheltered parts, so it looks as if it would pile up on both ends and leave the bulk of the thing fairly snow free—but that is merely theory.

Southgate, N.

CHAS. S. DYER.

COMPANY MATTERS.

Vickers, Ltd.

A CIRCULAR to the following effect has been addressed to the shareholders:—Owing to present conditions, it has been found impossible to complete the accounts for submission at the usual time to the ordinary general meeting, which the articles of association provide should be held not later than in the month of April. The directors are therefore compelled to postpone the meeting to a later date, when the accounts will be submitted. Recognising, however, the inconvenience which would be caused to the shareholders if payment of the final dividend for the year were also postponed, the directors feel justified in declaring a further dividend of 1s. 6d. per share, equal to 7½ per cent., free of income tax, on the ordinary share capital in anticipation of the dividend payable for the year 1915, when the accounts are completed. This, with the interim dividend already paid, will make a total distribution of 2s. 6d. per share, equal to 12½ per cent. for the year, free of income tax (against same). In view of the desirability of continuing the policy always to increase the strength of the Company's position—a policy especially desirable in time of war—the directors do not propose to recommend any further distribution of dividend for the year 1915.

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